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FERTILIZER ANALYSES

Pages 4-30

FERTILIZER REGISTRATIONS, Pages 31-40

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ADDRESS

Chemical Department, Maryland State College of Agriculture
COLLEGE PARK, MD.

ANALYSES OF

Fertilizers Sold in Maryland

BY THE DIVISION OF GENERAL SCIENCE OF

The Maryland State College of Agriculture

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The tables on the following pages are made up of the results of the Analysis of fertilizers made at the College from March to July, 1919, inclusive.

The majority of the samples analyzed are obtained by our sampling agents, the samples being taken while the goods are in transit, on vessels, wharves, cars or stations, from farmers' wagons, barns, etc. It is impossible for us to analyze all samples we collect; duplicates are generally omitted.

When a sample has been sent in by a farmer, his name, or initials, will be found after the "place of sampling." If "place of sampling" is not given, the sample has been made up two or more samples taken at different places. Before sending samples of fertilizer for analysis, farmers should always send for blank forms and directions, stating the number of blanks wanted. One blank is required for each sample. No sample will be analyzed unless the proper blank form is used.

The figures in the columns headed "Ammonia," "Potash" and "Phosphoric Acid," are percentages, or pounds per hundred. To get pounds per ton multiply the per cent by 20. The columns headed "Found" contain the results found by analysis; those headed "Guaranteed" contain the essential parts of the guarantee as stamped on the bags.

The "Comparative Value Found" is calculated from the results of analysis as found in our laboratory: the "Comparative Value Guaranteed" is calculated from the manufacturers' guaranteed analysis as printed on the bags; in each case using the following schedule:

SCHEDULE FOR CALCULATING COMPARATIVE VALUES.

In Mixed Fertilizers:

For Nitrogen, calculated as Ammonia.....	40	cts. per lb.,	$8.00 per unit
For Potash (K_2O).....	25	cts. per lb.,	5.00 per unit
For Available Phosphoric Acid.....	7½	cts. per lb.,	1.50 per unit
For Insoluble Phosphoric Acid.....	2	cts. per lb.,	0.40 per unit
For Insoluble Phosphoric Acid when from rock..	1	ct. per lb.,	0.20 per unit

In Dissolved Rock:

Available Phosphoric Acid.....	7½	cts. per lb.,	1.50 per unit
Insoluble Phosphoric Acid.....	1	ct. per lb.,	0.20 per unit

In Tankage:

For Nitrogen, calculated as Ammonia.....	40	cts. per lb.,	8.00 per unit
For Phosphoric Acid.....	3	cts. per lb.,	0.60 per unit

In Ground Bone:

For Nitrogen, calculated as Ammonia.....	40	cts. per lb.,	8.00 per unit
For Phosphoric Acid.....	3	cts. per lb.,	0.60 per unit

Special attention is invitated to the comparative values per unit in the above schedule. It is very much easier to make calculations on the unit basis. Thus, if Dried Blood containing 10 per cent of Ammonia sells for $8.00 per unit, it means that the selling price is the per unit value multiplied by the per cent of Ammonia, or in this case $80.00 per ton. In the case of a "Complete Fertilizer" with the analysis 2–8–2, if Ammonia is worth $8.00 per unit, Available Phosphoric Acid $1.50 per unit and Potash $5.00 per unit the value per ton would be $16.00, plus $12.00, plus $10.00 giving a value of $38.00 per ton.

Consumers, of fertilizer should, as a rule, purchase the "High-Grade" goods, as the price per unit and the cost of bags, handling, etc., is less for the actual amount of fertilizer received than is the case if "Low-Grade" fertilizers are used. The latter are frequently made by using large amounts of filler.

In the purchase of Acid Phosphate one should always demand 16 per cent goods or better. Acid Phosphate containing 18 per cent may sometimes be obtained. The consumers should be willing to pay more for the 18 per cent than for the 16 per cent goods. There is no excuse, whatever, for 10 per cent and 12 per cent Acid phosphate. It is made from the high grades by mixing in a make-weight or filler. Neither is there any excuse for Mixed Fertilizers containing less than 1 per cent of either Ammonia or Potash, if these are present. The Fertilizer Manufacturer's Association is now working on a scheme to eliminate "Low-Grade" fertilizers from the market and never use less than 2 per cent of Ammonia in an ammoniated fertilizer, never less than 2 per cent of Potash in fertilizer containing Potash, and not less than 14 per cent of total plant food, counting the Ammonia, Phosphoric Acid and Potash together. If this can be done, it will mean a great saving to the farmers, in the handling of extra weight, bags, freight, hauling, etc. However, the success of such a movement will depend to a considerable extent on the attitude of the buyer. If he insists on the stuff that is cheaper per ton, without regard to the amount of actual plant food, it is probable that he will be accommodated.

Prices of fertilizers and fertilizer materials are slightly lower than they were, and the tendency seems to be slowly downward. It does not appear likely, however, that prices will fall rapidly. The greatest increase in price over prewar prices has been in Potash, the importation of which has not been resumed on a large scale, and, when it is, there will probably be no sudden drop in price.

No.	Name and Address of Manufacturer and Name of Fertilizer	Place of Sampling (and Senders initials when not Sampled by the College Agent.)	NITROGEN Calculated as AMMONIA.		POTASH. K_2O.		PHOSPHORIC ACID.				Comparative Value Per Ton Found.	Comparative Value Per Ton Guaranteed.
							Insoluble.		Available.			
			Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.		
	Alexandria Fertilizer & Chem. Co.,	**Alexandria, Va.**										
38190	Reliable Amm'd Super-Phos....	Baltimore.....	1.26	1.25	.....	.....		.....	10.76	10.00	$26.60	$25.00
38191	Fish Phosphate with Potash....	Baltimore.....	2.02	2.00	1.04	1.00	.97	.....	9.58	9.00	36.12	34.50
	American Agricultural Chemical	**Co., N. Y., N. Y.**										
38417	Acid Phosphate 14%.....	Baltimore.....	.....	.....	.....	.....	1.22	.....	13.51	14.00	20.51	21.00
38178	Acid Phosphate 16%.....	Baltimore.....	.....	.....	.....	.....	.57	.....	17.19	16.00	25.90	24.00
38212	Ammoniated Fertilizer 7-8-0....	Baltimore.....	7.68	7.00	.....	.....	.52	.....	8.02	8.00	73.68	68.00
38225	Ammoniated Fertilizer 7-6-0....	Baltimore.....	7.15	7.00	.....	.....	.67	.....	6.50	6.00	67.22	65.00
38426	Ammoniated Fertilizer "A"....	Baltimore.....	1.16	1.00	.....	.....	1.12	.....	10.12	10.00	24.91	23.00
38300	Ammoniated Fertilizer "AA"..	Baltimore.....	2.04	2.00	.....	.....	.92	.....	11.38	10.00	33.76	31.00
38263	Ammoniated Fertilizer "AAA"..	Baltimore.....	2.90	3.00	.....	.....	.97	.....	10.30	10.00	39.04	39.00
38213	Amm'd Super-Phos. (LowGrade)	Baltimore.....	.90	1.00	.....	.....	.50	.....	8.81	8.00	20.62	20.00
38313	Ammoniated Super Phosphate..	Baltimore.....	1.40	2.00	.....	.....	1.47	.....	9.24	12.00	25.65	34.00
38380	Basic Lime Phosphate (Low Grade)	Baltimore.....	.....	.....	.....	.....	2.07	1.00	13.04	13.00	19.97	19.70
38214	Climax Top Dresser.....	Baltimore.....	4.52	5.00	.....	.....	.80	.....	9.44	8.00	50.64	52.00
38381	Dead Shot Phosphate (Low Grade)	Baltimore.....	.85	.50	.88	1.00	1.32	.....	8.71	8.00	24.80	21.00
38436	Dissolved Animal Bone.....	Baltimore.....	2.47	2.50	.....	.....	1.55	.....	13.07	12.00	39.99	38.00
38264	Dissolved Phosphate & Potash..	Baltimore.....	.....	.....	4.20	3.00	1.37	.....	12.43	12.00	39.92	33.00
38288	Fish Fertilizer.....	Baltimore.....	2.05	2.00	...	.....	.97	.....	10.22	10.00	32.01	31.00
38284	Fish Guano 1916.....	Baltimore.....	1.13	1.00	1.02	1.00	.82	.....	9.32	8 00	28.45	25.00
26611	5-7-5 Fertilizer.....	Baltimore.....	5.09	5.00	4.76	5.00	.77	.....	8.02	7.00	76.86	75.50
38192	5-7-3 Fertilizer.....	Baltimore.....	4.73	5.00	2.92	3.00	.62	.....	8.48	7.00	65.41	65.50
38216	4-8-3 Fertilizer.....	Baltimore.....	3.91	4.00	3.18	3.00	.55	.....	9.76	8.00	62.04	59.00

38211	H. G. Ammon. Fertilizer 5-8-0..	Baltimore.....	5.15	5.00	.....	.....	.55	.....	8.84	8.00	54.68	52.00
26612	Liberty Brand Phosphate.....	Baltimore.....	2.03	2.00	3.20	3.00	.80	.....	8.60	8.00	45.46	43 00
38382	Matchless Potash Manure	Baltimore.....	2.13	2.00	2.14	2.00	.85	.....	8.03	8.00	40.13	38.00
38386	Mogul Fertilizer.....	Baltimore.....	1.59	1.50	5.42	4 00	1.40	.....	8.76	8.00	53.52	44.00
26609	Prodigy Brand Guano	Baltimore.....	2 13	2.00	4.78	5.00	.82	.....	8 27	8.00	53.68	53.00
38441	Pure Bone Meal.....	Baltimore.....	5.29	4.50	.....	..	*22.43	*21.51	....	.....	55.78	48.91
38427	Special Mixture.....	Baltimore.....	2.06	2.00	1.78	2.00	87	.....	8.72	8.00	38.81	38.00
38301	Special Bone Mixture	Baltimore.....	1.83	1.50	..	.....	6.32	7.00	12.01	12.00	35.19	32.80
38217	Special Complete Fertilizer.....	Baltimore.....	1.13	1.00	1.74	2.00	1.70	.....	8.50	8.00	31.17	30.00
38268	XXX Ammoniated Fertilizer ...	Baltimore.....	1.19	1.50	.....	.....	1.10	.....	9.79	10.00	24.65	27.00
	A. A. C. Co., (Canton), Balto., Md.											
38240	Baker's Spec. Wht., Corn & Grs.	Relay.....	1.04	1.00	.96	1.00	.85	.....	9.80	9.00	28.16	26.50
38241	Baker's Standard Guano.....	Relay.....	2.53	2.50	1.06	1.00	1.30	.....	8.34	8.00	38 57	37.00
38393	Harrow Brand Crop Grower....	Baltimore.....	1.16	1.00	1.06	1.00	.87	.....	8.66	8.00	27.92	25.00
26606	Special Compound.....	Baltimore.....	2.66	2.50	5.72	6.00	1.12	.....	8.12	8.00	62.51	62.00
	A. A. C. Co., (Detrick), Balto., Md.											
38333	Gold Eagle 1916	Baltimore..	2.80	3.00	1.02	1.00	.87	.....	9.40	9.00	41.95	42.50
38169	5-8-0 Fertilizer	Baltimore.....	5.03	5.00	.....	.....	.65	.....	9.69	8.00	55.04	52 00
38193	7-8-0 Fertilizer	Baltimore.....	6.95	7.00	.....	.....	.55	.....	8.62	8.00	68.75	68.00
	A. A. C. Co., (Lazaretto), Balto., Md.											
38269	Crop Grower	Baltimore.....	1.89	2.00	2.10	2.00	.77	.....	9.03	8.00	39.48	38.00
38289	Farmers Reliable.....	Baltimore.....	2.06	2.00	1.20	1.00	1.07	.....	10.48	10.00	38.63	36.00
38334	Retriever Animal Fertilizer ...	Baltimore.....	2.15	2.25	1.52	1.00	1.25	4.50	11.72	9.00	42.88	38.30
38428	Spec. Tob. & Potato Fertz. 1916	Baltimore.....	3.04	3.00	1.02	1.00	1.15	.....	9.19	9.00	43.67	42.50
38180	7-6-0 Fertilizer	Baltimore.....	6.30	7.00	.....	..	.50	.....	7.63	6.00	52.05	65.00
26537	Tobacco & Potato Fertilizer 1916	Baltimore.....	2.83	3.00	1.04	1.00	1.10	.....	9.42	9.00	42.41	42.50
38418	Tomato Compound 1619.....	Baltimore.....	1.67	1.50	.88	1.00	1.27	.....	10.41	10.00	33.89	32.00
	A. A. C. Co., (Nickerson), Easton, Md.											
26603	Mixture 1916 (Low Grade)	Baltimore.....	.72	.50	1.02	1.00	.80	.....	8.32	8.00	23.66	21.00
	A. A. C. Co., (Slingluff), Balto., Md.											
38206	Plant Bed 10%	Baltimore.....	9.34	10.00	1.03	1.00	.50	.....	5.84	5.00	33.83	92.50
	A. A. C. Co., (Susquehanna), Balto., Md.											
38429	H. G. Super Phosphate.....	Baltimore.....	.....	.....	.....	....	.90	.....	16.19	16.00	24.47	24 00
26535	Crop Grower (Low Grade).....	Baltimore.....	1.13	1.00	1.02	1.00	.85	.....	8.49	7.00	27.22	23.50

No.	Name and Address of Manufacturer and Name of Fertilizer	Place of Sampling (and Senders initials when not Sampled by the College Agent.)	NITROGEN Calculated as AMMONIA.		POTASH. K_2O.		PHOSPHORIC ACID.				Comparative Value Per Ton Found.	Comparative Value Per Ton Guaranteed.
							Insoluble.		Available.			
			Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.		
	A. A. C. Co., (Zell), Balto., Md.											
38243	Economizer Phosphate 1916.	Annapolis	1.02	1.00	1.28	1.00	.90	.....	8.17	8.00	27.18	25.00
38240	Little Treasure (Low Grade)	Baltimore	1.03	1.00	.92	1.00	.95	.....	7.51	7.00	24.41	23.50
38241	Truck Manure 1916	Annapolis	2.05	2.50	1.42	1.00	1 42	.....	8.10	8.00	36.22	37.00
	A. A. C. Co. (Wheeler), Balto., Md.											
38394	Ammoniated Corn Phosphate	Baltimore	2.25	2.00	.....	.....	1.15	.....	10.60	10.00	34.36	31.00
38302	H. G. Acid Phosphate 16%	Baltimore	.....	.....	.....	.....	.65	.....	16.36	16.00	24 67	24.00
26607	Potato Fertilizer	Baltimore	2.13	2.00	1.84	2.00	1.02	.....	8.61	8.00	39.37	38.00
38248	Wheat & Clover	Baltimore	.....	.....	1.60	2.00	1.37	.....	10.04	10.00	23 33	25.00
	Acme Guano Co., Balto., Md.											
38245	Ammoniated Fish Guano	Baltimore	3 26	3.00	.....	.....	1.40	.....	7.29	8.00	37.58	36.00
	American Fertilizing Co., Balto., Md.											
26601	Acid Phosphate 14%	Ellicott City	.....	.....	.....	.....	.62	.....	15.16	14.00	22.86	21.00
38181	Acid Phosphate 16%	Baltimore	.....	.....	.....	.....	.87	.....	17.55	16.00	26.50	24.00
38442	Ammoniated Crop Compound	Baltimore	1.01	1.00	2.20	2.00	1.32	1.00	8.85	8.00	32.89	30.40
26608	Best Grain & Grass Formula	Baltimore	2.01	2.00	4.16	4.00	3.62	1.00	8.81	10.00	51.55	51.40
38246	Champion Amm'd Phosphate	Baltimore	2.15	2.00	.....	.....	.92	.....	10.70	10.00	33.62	31 00
26613	Eagle Crop Grower	Baltimore	2.03	2.00	2.20	2.00	1.60	1.00	8.60	8.00	40 78	38.40
38466	Eagle Potato & Truck Grower	Jesterville (I W.R.)	3.79	4.00	.....	.....	.52	1.00	8.61	8.00	43.45	44.40
26547	Excelsior Guano	Baltimore	2.13	2.00	4.76	5.00	2.03	1.00	8.02	8.00	53.68	53.40
38270	Fish Guano	Ellicott City	1.01	1.00	.....	.....	1.57	.....	10.83	10.00	24.96	23.00
38247	Fish & Bone Compound	Baltimore	2.17	2.00	3.82	3.00	2.60	.....	7.63	8.00	48.95	43.00

38335	Fish & Bone Compound Rev....	Baltimore.....	2.18	2.00	1.36	1.00	2.00	1.00	9.19	8.50	38.83	34.15
38195	Fish & Bone Special.....	Baltimore.....	1.95	2.00	.....	.....	2.02	1 00	11.96	11.00	34.35	32.90
38285	Grain & Grass	Baltimore.....	1.08	1.00	3.66	3.00	1.60	.....	9.38	9.00	41.66	36 50
38445	Gr. Reliable Amm'd Form (L.G.).	Leslie	.75	.50	.....	.....	1.00	1.00	10.40	10.00	22.00	19.40
38367	Reliable Guano.....	Baltimore.....	1.09	1.00	1.14	1.00	1.27	1.00	8.64	8.00	27.89	25.40
38446	Special Fish Guano.....	Leslie	1.23	1.00	.....	.....	1.20	1.00	10.83	10.00	26.57	23.40
38196	Stable Manure Sub. (Low Grade)..	Baltimore.....	3.69	3.00	.....	.....	.50	1.00	8.94	7.00	43.13	34.90
38321	Truck Amm'd Super Phosphate	Baltimore...	5.12	5.00	.....	.....	1.35	1.00	9.09	8.00	55.14	52.40
	Armour Fertilizer Works, Inc., Bal	**timore, Md.**										
38170	Acid Phosphate 16%.....	Baltimore.....	.....	.....	.....	.....	1.85	.....	17.74	16.00	26.98	24.00
38359	Crop Grower	Chestertown.....	1 01	1.00	1.86	2.00	.67	.....	9.52	8.00	31.93	30.00
38207	Fish Mixture.....	Baltimore.....	2.29	2.00	.....	.....	1 85	.....	9.64	10 00	33.52	31.00
38249	5-8-0 Fertilizer.....	Baltimore.....	4.69	5.00	.....	.....	1.87	.....	8.32	8.00	50.75	52 00
38314	4-8-2 Fertilizer.....	Baltimore.....	3.62	4.00	2.05	2.00	1.40	.....	8.12	8.00	51.95	54.00
38226	4-10-0 Fertilizer.....	Baltimore.....	3.24	4.00	.....	.....	1.55	.....	11.06	10.00	43 13	47.00
38250	Grain Grower	Baltimore.....	1.96	2.00	1.80	2.00	1.95	....	8.95	8.00	38.89	38.00
38197	Ground Tankage	Baltimore.....	7.88	9.00	.....	.....	*7.43	*6.87	.....	.....	67.50	76.12
38395	½-8-0 Fertilizer. (Low Grade)..	Baltimore.....	.68	.50	.....	.....	.95	.....	8.33	8.00	18.32	16.00
38304	1-10-0 Fertilizer (Low Grade)..	Freeland	1.14	1.00	.....	.....	1.25	.....	10 86	10.00	25.91	23.00
38303	1-8-0 Fertilizer (Low Grade) ...	Freeland.....	1.16	1.00	.....	.....	1.45	.....	8.25	8.00	22.24	20.00
38387	1½-9-0 Fertilizer (Low Grade) ..	Baltimore.....	1.43	1.50	.....	...	1.25	.....	9.19	9.00	25.73	25.50
38420	Phosphate & Potash.....	Baltimore.....	.....	.....	3.68	4.00	1.10	.....	10.84	10.00	34.88	35.00
38383	Phosphate & Potash No. 1.....	Baltimore.....	...	.....	2.24	2.00	.87	.....	10.40	10 00	26 97	25 00
38198	3-10-0 Fertilizer.....	Baltimore.....	2.87	3.00	...	.....	1.47	.....	10.66	10.00	39.54	39.00
38305	Raw Bone Meal	Baltimore.....	5.19	4.50	.....	....	*23.59	*21.50	.....	.....	55.67	48.90
38290	Star Phosphate 14%.....	Baltimore.....	.....	.....	....	.....	.70	.....	14.28	14.00	21.56	21.00
38199	2-10-0 Fertilizer.....	Baltimore.....	2.22	2.00	.....	.....	1.50	.....	10.49	10.00	34.10	31.00
38396	2-11-0 Fertilizer.....	Baltimore.....	1.91	2.00	.....	.....	1 35	.....	11.27	11.00	32.73	32 50
38324	3-10-0 Fertilizer.....	Baltimore.....	3.48	3.00	...	.....	1 50	.....	9.69	10.00	42 98	39.00
38200	Wheat, Corn & Oats (Low Grade)	Baltimore.....	1.11	1.00	1 05	1.00	1.15	.....	7.40	7.00	25.69	23.50
38368	White's Tomato Special 1-8-2...	Baltimore.....	1.02	1.00	1.82	2.00	1.10	.....	8.60	8.00	30.66	30.00
38369	White's Tomato Special (L. G.)	Baltimore.....	1.62	1.50	...	.....	1 25	.....	9.17	9.00	27 22	25.50
38397	Tuscarora Amm'd Phos. (L. G.)	Baltimore.....	1.18	1.00	1.06	1.00	.92	.....	8.80	7.00	28.31	23.50
38419	Tuscarora Crop Grower	Baltimore.....	1.16	1 00	2.03	2.00	.97	.....	8.37	8.00	32 38	30.00
38388	Tuscarora Stand. Phosphate....	Baltimore.....	1.83	2.00	1.96	2 00	1.25	.....	8.39	8.00	37.53	38.00
	Baltimore Fertilizer Co., Balto., Md.											
38376	Honest Acid Phosphate.....	La Plata.....	.....	.....	.....	.....	.82	1.00	15.95	16.00	24.09	24.20
38227	Honest Ammoniated Bone.....	Baltimore.....	2.13	2.00	1.92	2.00	1.72	.....	8.02	8.00	39.36	38.00

*Total Phosphoric Acid.

No.	Name and Address of Manufacturer and Name of Fertilizer	Place of Sampling (and Senders initials when not Sampled by the College Agent.)	NITROGEN Calculated as AMMONIA.		POTASH. K_2O.		PHOSPHORIC ACID.				Comparative Value Per Ton Found.	Comparative Value Per Ton Guaranteed.
							Insoluble.		Available.			
			Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.		
	Baltimore Fertilizer Co., Balto., Md.											
38228	Honest Crop Grower	Baltimore	.90	1.00	.72	1.00	1.06	.....	9.01	8.00	24.74	25.00
38385	Honest Potato Grower (L. G.)	La Plata	1.93	2.00	.52	.50	2.25	.....	8.59	8.00	31.83	30.50
38208	Honest 7% Guano	Baltimore	6.89	7.00	.....	.....	.92	.....	6.41	6.00	65.11	65.00
38377	No. 2 Ani. Wht. & Grass Grow.	La Plata	2.18	2.00	.....	.....	2.32	.....	12.36	10.00	36.91	31.00
38229	Old Honesty Fertilizer (Low Grade)	Baltimore	1.55	1.00	.....	.....	2.37	.....	8.87	8.00	26.66	20.00
38398	Old Honesty Fertilizer (Low Grade)	Baltimore	1.04	1.00	.....	.....	.90	.....	9.03	8.00	22.23	20.00
	Baltimore Pulverizing Co., Balto., Md.											
38265	Ammoniated Fish Guano	Baltimore	2.90	3.00	.....	.....	2.05	.....	6.72	8.00	34.10	36.00
38297	Corn & Grain Grower	Baltimore	.....	.....	1.44	1.00	3.40	.....	9.04	12.00	23.44	23.00
38283	Dissolved Animal Bone	Baltimore	2.18	2.00	.....	.....	.55	.....	13.41	12.00	37.78	34.00
38315	Farmers Favorite (Low Grade)	Baltimore	1.43	1.00	1.52	1.00	2.45	.....	6.02	7.50	29.05	24.25
38336	Harvest Queen No. 2	Baltimore	1.02	1.00	.....	.....	2.22	.....	9.54	10.00	23.36	23.00
38271	H. G. Potato Guano	Baltimore	1.74	2.00	.....	.....	1.97	.....	8.81	10.00	27.93	31.00
38316	Penniman's Excelsior	Baltimore	.....	.....	1.16	1.00	3.20	.....	12.90	12.00	25.79	23.00
38421	Penniman's Tobacco Grower	Baltimore	2.12	2.00	.76	1.00	2.00	.....	8.79	9.00	34.75	34.50
38272	Potato Climax No. 2	Baltimore	3.89	4.00	1.90	2.00	1.27	.....	8.04	8.00	53.19	54.00
38437	Royal Compound	Baltimore	2.10	2.00	.94	1.00	1.85	.....	7.03	8.00	32.86	33.00
38317	S. C. Phosphate	Baltimore	.....	.....	.....	.....	.42	.50	17.69	16.00	26.62	24.10
38273	Spec. Potato Mixture	Baltimore	2.04	2.00	.94	1.00	2.15	.....	7.83	7.00	33.63	31.50
38326	Spec. Sweet Potato Fertilizer	Baltimore	2.30	2.00	1.36	2.00	2.50	.....	6.43	8.00	35.85	38.00
26541	Special Tomato	Baltimore	1.16	1.00	2.16	2.00	1.30	.....	6.05	8.00	29.68	30.00
38370	Truckers Choice	Baltimore	3.31	3.00	1.44	1.00	1.47	.....	9.56	8.00	43.61	41.00

	Baugh & Sons Co., Balto., Md.												
38274	Acid Phosphate 14%	Baltimore	.....	.....	.....	.....	.47	.....	13 83	14.00	20.84	21.00
38230	Acid Phosphate 16%	Baltimore	.....	.....	.....	.....	1.62	.....	16.85	16.00	25.60	24.00
38384	Animal Base & Potash Comp'd	Baltimore	2.17	2.00	1.04	1.00	.97	.....	11.14	9.00	39.66	34.50
38473	Animal Tankage	Cambridge (S.L.B.)	8.59	8.00	.....	.....	.....	.....	.....	.....	68.72	64.00
26614	Balanced Plant Food	Baltimore	2.10	2.00	5.16	5.00	2.62	.....	7.42	8.00	54.78	53.00
38337	Complete Animal Base Fertz	Baltimore	2.08	2.00	1.70	1.00	.85	.....	10.72	10.00	41 56	36.00
38182	Corn & Oats Fertilizer	Baltimore	2.08	2.00	.....	.....	.78	.....	10.42	10.00	32.58	31.00
38231	Crop Grower	Baltimore	1.13	1.00	1.36	1.00	1.87	.....	8 02	8.00	28.62	25.00
38389	Durable Plant Food	Baltimore	2.34	2.00	2.30	2.00	1.65	.....	8.62	8.00	43.81	38.00
38438	Excelsior Guano	Baltimore	1.91	2.00	.....	.....	.82	.....	11.50	10.00	32.86	31.00
38327	Fish Mixture	Baltimore	2.32	2.00	1.56	1.00	1.42	.....	9 40	9.00	41.03	34.50
38328	Fish & Bone Guano	Baltimore	2.03	2.00	.....	.....	.50	.....	10.40	10.00	32.04	31 00
38215	5% Trucker	Baltimore	4.61	5.00	.....	.....	.32	.....	8.61	8.00	49.93	52.00
38218	General Crop Grower	Baltimore	1.16	1.00	1.05	1.00	1.95	.....	9.37	8.00	29.37	25.00
38165	Grand Rapid Guano	Baltimore	3.03	3.00	1.16	1.00	.65	.....	10.44	9.00	45.96	42.50
38361	Half & Half Mixture	Aberdeen	1.67	1.50	.....	.....	6 25	.....	12.64	12.00	34.82	30 00
38439	H. G. Animal Base	Baltimore	3.55	4.00	.....	.....	.45	.....	10.66	10.00	44 57	47 00
38275	H. G. Tankage	Baltimore	9.01	7.00	.....	.....	.....	.....	.....	.....	72.08	56.00
26615	Maximum Potato Guano	Baltimore	5.87	7.00	3 02	3.00	2.20	.....	5.45	6.00	71.12	80.00
38171	New Process 10% Guano	Baltimore	9.88	10 00	.....	....	.85	.....	6.32	5.00	88 86	87.50
38166	Norfolk Special Guano	Baltimore	6.37	7.00	.....	.....	.55	.....	10 82	8.00	67 41	68.00
38276	Old Stand-By Dis. Animal Base	Baltimore	2.34	2.00	....	.....	.75	.....	11.65	12.00	36.50	34.00
38251	Peninsula Grain Producer (L.G.)	Baltimore	1.13	1.00	.....	.....	1.57	.....	10.46	9.00	25.36	21.50
38201	Peruvian Substitute	Baltimore	4 69	5.00	1.04	1.00	1.03	.....	9.30	8.00	57.08	57.00
38167	Pure Dissolved Animal Bone	Baltimore	2 90	2.50	.....	.....	9.77	....	12.56	13.00	45.95	39.50
38172	Raw Bone Meal	Baltimore	3.82	4.00	.....	..	*20.53	*20 50	.....	.....	42.83	44.30
38392	Soluble Alkaline Super Phos	Baltimore	.....	...	2.03	2.00	75	.....	10.22	10.00	25.63	25.00
38202	Special Potato Manure	Baltimore	2.59	2.00	1.01	1.00	1.82	.....	10.15	10.00	41 73	36.00
26536	Special Vegetable Compound	Baltimore	2.54	1.00	1.02	3.00	.95	.....	9.53	9.00	40.10	36.50
38371	Standard Potato Grower	Baltimore	3.72	4.00	1.16	1.00	.92	.....	8 80	8.00	49.13	49.00
38252	Tomato Compound	Baltimore	2.05	2.00	1.02	1 00	3.95	.....	7.85	10.00	34.86	36.00
38219	Tri-Unit Potato Guano	Baltimore	4.68	5.00	2.76	3.00	2.55	.....	8.16	8.00	64.50	67.00
38168	Truckers Favorite	Baltimore	4.15	3.00	.....	.....	.65	.....	8.47	10.00	46.17	39.00
26542	Whites Tomato Special	Baltimore	1.67	2.00	.....	.....	1.65	.....	10.15	10.00	29.25	31.00
	Berg Co., Philadelphia, Pa.												
38447	Animal Bone & Meat	Fallston	3.41	4.00	.....	.....	*17.74	*17.00	.....	.....	37.92	42.20

*Total Phosphoric Acid.

No.	Name and Address of Manufacturer and Name of Fertilizer	Place of Sampling (and Senders initials when not Sampled by the College Agent.)	NITROGEN Calculated as AMMONIA.		POTASH. K_2O.		PHOSPHORIC ACID.				Comparative Value Per Ton Found.	Comparative Value Per Ton Guaranteed.
							Insoluble.		Available.			
			Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.		
	F. W. Bolgiano & Co., Washingt	**on, D. C.**										
38277	Acid Phosphate 16%.....	Baltimore.....	.....	.....	.....	.....	.35	.....	15.59	16.00	$23.46	$24.00
	Bowker Fertilizer Co., Boston, Ma	**ss.**										
38390	Potash Mixture	Baltimore.....	.....	.....	2.02	2.00	.65	.....	11.35	10.00	27.26	25.00
	C. H. Braun Sons, Halethorp, Md.											
38478	Bone Tankage.....	Colgate.....	5.29	6.00	.....	.....	*18.30	*13 00	.....	.....	53.30	55.80
38253	2-8-1 Fertilizer.....	Baltimore.....	2.25	2.00	.82	1.00	4.17	.....	9.86	8.00	38.56	33.00
26545	2-8-2 Fertilizer.....	Baltimore.....	2.06	2.00	2.02	2.00	4.42	.....	10.88	8.00	44.67	38.00
	Bryant Fertilizer Co., Alexandria,	**Va.**										
38431	Queen Ammoniated Bone.....	Baltimore.....	1.09	1.00	1 26	1.00	1.12	1.00	8.25	8.00	27.85	25.40
	Herbert Bryant's Son, Alexandria,	**Va.**										
38435	Standard Fish & Bone.....	Dickerson	1.50	2.00	.....	.....	1.05	.....	10.86	10.00	28.71	31.00
	Central Chem. Co., Hagerstown,	**Md.**										
38401	Acme Brand (Low Grade).....	Hagerstown	1.01	1.00	.....	.....	1.25	.....	8.71	8.00	21.65	20.00
38338	Dissolved Phosphate.....	Baltimore.....	.....	.....	.....	.....	1 15	.....	17.43	16.00	26.38	24.00
38402	Dissolved Bone Compound.....	Hagerstown	1.88	2.25	....	.....	3.27	.....	13.10	13.00	36.00	37.50
38403	Fish Bone Compound.....	Hagerstown	1.52	1.50	.....	...	1.40	.....	10.02	10.00	27.75	27.00
38404	Golden Sheaf.....	Boonsboro	.80	1.00	.82	1.00	1.87	.....	7.42	8.00	22.38	25.00
38406	Pride of the Valley.....	Hagerstown	.82	1.00	.....	.....	1.22	.....	10.61	10.00	22.97	23.00
38408	Special Bone Mixture	Hagerstown	1.77	2.00	.. ...	.....	2.10	.....	11.26	10.00	30.89	31 00
38409	Superior	Hagerstown	1 01	1.00	.....	.....	1.05	.....	12.42	12.00	27.13	26.00

	Chesapeake Chem. Co., Salto., Md.											
38399	Buyers Favorite	Baltimore	1.14	1.00	.....	.....	1.22	.....	10.38	10.00	25.18	23.00
26538	Dissolved Phosphate	Baltimore	.....	.....	.....	.....	.77	.....	15.25	16.00	23.03	24.00
38306	5-8-3 Fertilizer	Baltimore	5.24	5.00	3.86	3.00	.85	.....	10.31	8.00	77.03	67.00
38293	Gem Phosphate (Low Grade)	Baltimore	1.16	1.00	.....	.....	.97	.....	8.02	8.00	21.70	20.00
38266	1½-8-0 Fertilizer (Low Grade)	Baltimore	1.55	1.50	.....	.....	1.55	.....	7.60	8.00	24.42	24.00
38232	Money Producer	Baltimore	1.06	1.00	.84	1.00	1.15	.....	8.43	8.00	25.79	25.00
38233	7-9-0 Fertilizer	Baltimore	7.05	7.00	.....	.....	.97	.....	8.73	9.00	69 89	69.50
38307	7-6-2 Fertilizer	Baltimore	7.12	7.00	2.14	2.00	.95	....	6.73	6.00	78.14	75.00
	Chicago Feed & Fertilizer Co., Chicago, Ill.											
26549	Magic Pul. Sheep Manure (L.G.)	Baltimore	2.39	2.25	2.24	1.25	*2.39	*1.50	.....	.....	31.75	25.15
	Cincinnati Plant Food Co., Cincinnati, O.											
38443	Pulverized Sheep Manure (L.G.)	Baltimore	2.51	2.43	2.78	1.50	*1.91	*1.00	.....	.....	35.13	32.94
	Columbia Guano Co., Balto., Md.											
38183	Big Crop Ammoniated Phos	Baltimore	6.59	5.00	.....	.....	.82	.....	8.86	8.00	66.34	52.00
	Josiah Cope & Co., Balto., Md.											
38444	Ammoniated Fertilizer "AAA"	Baltimore	2.83	3.00	.....	...	1.32	.....	10.03	10.00	38.22	39.00
38294	Fish Guano (Low Grade)	Baltimore	2.05	2.00	.....	.....	1.12	.....	8.44	8.00	29.51	28.00
38432	H. G. Super Phosphate	Baltimore	.....	.....	.....	.....	.95	.....	16.14	16.00	24.40	24.00
	L. E. P. Dennis & Son, Crisfield, Md.											
38343	No. 1 Fish Mixture	Crisfield	2.32	3.00	.....	.....	2.12	.....	8.88	8.00	32.73	36.00
38344	No. 2 Fish Mixture (Low Grade)	Crisfield	1.52	2.00	.....	.....	2.32	.....	9.05	8.00	26.67	28.00
38345	Special Round Potato Mixture	Crisfield	4.42	5.00	.....	.....	1.50	.....	8.37	8.00	48.52	52.00
38448	2-10-0 Fish Mixture	Crisfield	1.81	2.00	.....	.....	1.87	.....	10.37	10.00	30.79	31.00
	Dize & North, Crisfield, Md.											
26617	Ground Crab Scrap	Crisfield	3.53	3.50	.....	.....	*3.76	*3.50	.....	.....	30.90	30.10
	Dudley & Carpenter, Balto., Md.											
26604	Acid Phosphate High Grade	Baltimore	.....	.....	.....	.....	1.45	.....	16.09	16.00	24.43	24.00
26543	Corn Grower	Baltimore	1.86	2.00	.....	.....	1.42	.....	11.20	10.00	32.25	31.00
38184	Early Potato Fertilizer	Baltimore	4.64	5.00	.82	1.00	2.82	.....	8.45	8.00	55.03	57.00
26546	Reliable Grain Fertilizer	Baltimore	1.06	1.00	1 02	1.00	.90	.....	9.81	8.00	28.66	25.00
38422	Truck and Vegetable Fertilizer	Baltimore	1.47	2.00	.92	1.00	.70	.....	8.89	8.00	29.98	33.00
	Edelen Bros., Balto., Md.											
38423	High Grade Tobacco Guano	Baltimore	4.01	4.00	1.38	1.00	1.20		7.89	6.00	51.30	46.00

No.	Name and Address of Manufacturer and Name of Fertilizer	Place of Sampling (and Senders initials when not Sampled by the College Agent.)	NITROGEN Calculated as AMMONIA.		POTASH. K_2O.		PHOSPHORIC ACID.				Comparative Value Per Ton Found.	Comparative Value Per Ton Guaranteed.
							Insoluble.		Available.			
			Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.		
	Edelen Bros., Balto., Md.											
26600	Special Tobacco Guano..	Baltimore.....	2.85	3 00	1.14	1.00	1.57	.....	9.75	8.00	43.76	41.00
38295	Special Wheat and Grain Mixture	Baltimore.....	1.48	1.00	1.14	1.00	1.00	.....	9 46	8.00	32.13	25.00
	Eureka Chem. Co., Balto., Md.											
38346	Corn and Potato (Low Grade)...	Rising Sun.....	1.16	1.00	1.40	.75	1.05	.30	7.89	8.00	28.54	23.87
38347	Fish and Potash (Low Grade)...	Rising Sun.....	.56	.50	.32	.25	.75	.30	8 46	8.00	19.07	17.37
38348	Potato and Vegetable	Rising Sun.....	2.05	2.00	1.24	1.00	.87	.50	8.25	7.00	35.33	31.70
	Eureka Fertilizer Co., Perryville, Md.											
38449	Corn and Oats (Low Grade)	Perryville.....	.....	.....	.....	.....	2.82	1.00	11.81	10.00	18.28	15.20
26533	Corn and Potatoes.....	Perryville.....	1.06	1.00	.....	.....	3.01	1.00	11.65	12.00	27.16	26.40
	W. S. Farmer & Co., Balto., Md.											
38254	Acid Phosphate High Grade	Baltimore.....	.....	....	.....	.....	.42	.....	17.45	16.00	26.26	24.00
38286	All Crop Mixture No. 1.....	Baltimore.....	1.25	1.00	.....	.....	.95	.....	10.76	10.00	26.52	23.00
38308	All Crop Mixture No. 2.....	Baltimore.....	2.08	2.00	.....	.....	1.22	.....	11.42	10.00	34.26	31.00
26539	All Crop Mixture No. 3	Baltimore.....	3.28	3.00	.....	.....	1.10	.....	10.58	10.00	42.55	39.00
38339	Anne Arundel Trucker 1916.....	Baltimore	4.85	5.00	1.04	1.00	.87	.....	9.43	8.00	58.50	57.00
38185	Harvest Queen.....	Baltimore.....	1.62	1.50	1.04	1.00	1.15	.....	10.60	10.00	34.52	32.00
38204	7% Guano.....	Baltimore.....	6.67	7.00	.....	.....	.77	.....	7.20	6.00	64.47	65.00
38186	Standard Phosphate	Baltimore.....	3.02	2.50	1.68	1.00	.92	.....	10.52	10.00	48.71	40.00
38187	10% Tobacco Bed Guano	Baltimore.....	9 90	10.00	.....	.....	.50	.....	7.26	5.00	90.29	87.50
	Farmers' Exchange Co., Union Bridge, Md.											
38410	Acid Phosphate	Union Bridge.....	.....	.....	.....	.....	.32	.....	16.21	16.00	24.38	24.00

	Farmers Fertilizer & Feed Co., We	**stminster, Md.**										
38411	Indian Chief	New Windsor	.89	1.00			1.85	1.00	12.85	11.00	27.14	24.90
38412	XX Phosphate (Low Grade)	Westminster	1.55	1.00			.72	1.00	9.53	9.00	26.99	21.90
	Farmers & Planters Co., Salisbur	**y, Md.**										
38362	Acid Phosphate	Preston					.12		17.33	16.00	26.02	24.00
38363	Early Vegetable Guano	Preston	4.21	5.00			.32		10.52	8.00	49.59	52.00
38364	Fish Mixture	Salisbury	1.81	2 00			.60		12.34	10.00	33.23	31.00
38349	General Crop Grower	Princess Anne	1.23	1.00			.75		11.87	11 00	27.95	24.50
38365	Special Fish Mixture	Preston	2.51	2.50			.35		10.81	9.00	36.44	33.50
38366	Truckers Mixture	Preston	2.56	3.50			.30		11.63	9.00	38.05	41.50
	Griffith & Boyd Co., Balto., Md.											
38173	Acid Phosphate 16% High Grade	Baltimore					.75		16.52	16.00	24.93	24.00
38297	Dissolved Animal Bone	Baltimore	2.90	2.50			1.37		10.95	10 00	40.18	35.00
38209	Farmers Bone Mixture	Baltimore	1.74	2.00			.32		9.34	9.00	28.06	29.50
38329	Farmers Tomato and Potato	Baltimore	1.71	1.50	.96	1.00	.77		9.35	8 00	32.82	29.00
38278	Fish and Bone Mixture (Low Grade)	Baltimore	1.62	1.75			.97		8.67	7.00	26.36	24.50
26618	Fish Bone and Potash (Low Grade)	Havre de Grace	1.81	1.75	84	1.00	1.30		7.79	7.00	30.89	29.50
38400	Fish Bone and Potash with 2% Potash	Baltimore	1 77	1.75	1.28	2.00	1.07		8.24	7.00	33.35	34.50
38391	Harvest Queen Phosphate	Baltimore	1.19	1.00	.76	1.00	.45		9.02	9.00	27.03	26.50
38330	Nitro Crop Feeder (Low Grade)	Baltimore	8.36	9.00	.64	.50	.20		1.30	1 50	72.11	76.75
26602	Peerless Mixture (Low Grade)	Colora	.51	.50			.62		9.80	8.00	19.03	16.00
26540	Pure Fine Ground Bone Meal	Baltimore	4.71	4.00			*18.81	*20.00			48.97	44.00
26544	Queen Guano (Low Grade)	Baltimore	1.09	1.00			1.35		10.17	9.00	24.52	21.50
38424	Special Grain Grower	Baltimore			2.42	2.00	3.30		8.58	10.00	25.63	25.00
26610	Truckers Stable Manure (Low Gr'd)	Baltimore	2.78	3.50	.94	1.00	.85		6.64	5.25	37.24	40.88
38332	Vegetable Bone Fertilizer	Baltimore	3.17	3.00	.66	1 00	.52		7.21	8.00	39.69	41.00
	Griffith & Turner Co., Balto., Md.											
38279	Acid Phosphate 14%	Baltimore					.57		15.69	14.00	23.65	21.00
38256	Amm'd Alk. Plant Food (Low Gr'd)	Baltimore	1.13	1.00	.92	1 00	1.00	1.00	7.77	6.50	25.70	23.15
	Hampstead Fertilizer Co., Hampste	**ad, Md.**										
38413	1-8- (Low Grade)	Hampstead	1.23	1.00			1.72		8.62	8 00	23.46	20.00
38414	1-10-	Hampstead	1.01	1.00			1.72		10.58	10.00	24.64	23.00
38415	1-8-2	Hampstead	1.50	1.00	1.36	2.00	1.60		8.31	8.00	31.91	30.00
38416	2-10-	Hampstead	1.62	2.00			1.52		11.36	10.00	30.61	31.00

*Total Phosphoric Acid.

No.	Name and Address of Manufacturer and Name of Fertilizer	Place of Sampling (and Senders initials when not Sampled by the College Agent.)	NITROGEN Calculated as AMMONIA.		POTASH. K_2O.		PHOSPHORIC ACID.				Comparative Value Per Ton Found.	Comparative Value Per Ton Guaranteed.
							Insoluble.		Available.			
			Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.		
	S. M. Hess & Bro., Inc., Philadelph	**ia, Pa.**										
38257	Farmers General Fertilizer.....	Baltimore.....	2.12	1.00	1.05	1.00	.87	.....	10.54	10.00	38.37	28 00
38258	Fish and Potash Manure.....	Baltimore.....	2.03	2.00	1.04	1.00	1.12	.....	9.86	9.00	36.68	34.50
38372	Keystone Phosphate.....	Baltimore.....	1.08	1.00	1.04	1.00	.97	.....	8.91	8.00	27.60	25.00
38174	Market Gardners Manure.....	Baltimore.....	5.05	5.00	.....	.....	.62	.....	9.66	8.00	55.14	52 00
38440	Potato Manure.....	Baltimore.....	3 04	3.00	1.02	1.00	1.12	.....	9.13	9.00	43.57	42.50
38220	Reliable Super Phosphate	Baltimore.....	3.16	3.00	.....	.....	.75	.....	10.65	10.00	41.56	39.00
38221	Special High Grade Acid Phosphate.....	Baltimore.....	.....	.....	.....	.....	.42	.....	17.27	16.00	25.99	24.01
38280	Special Crop Manure 1916	Baltimore.....	1.13	1.00	1.06	1 00	.95	.....	9.81	9.00	29.44	26.50
38175	Special Potato Manure	Baltimore.....	4.51	4.50	1.08	1.00	.92	.....	9.62	8.00	56.28	53.00
38259	Standard Super Phosphate	Baltimore.....	1.19	1.00	.....	.....	1.02	.....	10.55	10.00	25.76	23.00
38176	Strawberry and Potato Grower.	Baltimore.....	7.12	7.00	.....	.....	.47	.....	9.12	6.00	70.83	65.00
38222	Superior Super Phosphate.....	Baltimore.....	2.13	2.00	.....	.....	1.12	.....	10.68	10.00	33.51	31.00
38210	Wheat & Grass Manure 1916...	Baltimore.....	1.19	1.00	1.16	1.00	.97	.....	9.93	9.00	30.61	26.50
	Home Fertilizer & Chem. Co., Bal	**to., Md.**										
38177	Eclipse Dissolved Phosphate...	Baltimore.....	.....	.....	.....	.....	.62	1.00	16.60	16.00	25.02	24.20
38425	Quick Grower ½-8-2 (Low Grade)	Baltimore.....	61	.50	1.58	2.00	.60	.....	8.67	8.00	26.03	26.00
38340	Yancys Form. Yellow Leaf Tob.	Baltimore...	3.48	3.00	2.36	2.00	2.50	.....	9.09	8.00	54.28	46.00
	Horsey, Roe & Co., Greensboro, Md.											
38350	Acid Phosphate 16%.....	Greensboro	.....	.....	.....	.....	.90	.....	16.87	16.00	25.49	24.00

38351	Special Mixture	Greensboro	.94	1.00	1.88	2.00	2.35		8.97	8.00	31.32	30.00
38352	Special Mixture	Greensboro	1.43	1.00	1.66	3.00	3.25		9.63	8.00	35.49	35.00
38353	Special Mixture	Greensboro	1.37	2.00	.80	2.00	2.82		11.65	8.00	33.57	38.00
38354	Special Mixture	Greensboro	3.60	3.00	3.79	3.00	5.90		6.85	8.00	60.39	51.00
38355	Special Mixture	Greensboro	2.03	2.00	3.48	5.00	4.42		9.85	8.00	50.19	53.00
38356	Special Mixture	Greensboro			4.70	5.00	3.30		10.66	12.00	40.15	43.00
38357	Special Mixture	Greensboro	2.56	2.00			4.22		11.07	10.00	38.78	31.00
	Hubbard Fertilizer Co., Balto., Md.											
38234	Acid Phosphate 14%	Baltimore					1.17		15.80	14.00	23.18	21.00
38260	Acid Phosphate 16%	Baltimore					1.65		17.32	16.00	26.31	24.00
37378	Alkaline 12 and 1	Morgantown			1.04	1.00	1.35		11.85	12.00	23.25	23.00
38235	Ammoniated Fertilizer	Baltimore	3.05	3.00			1.12		10.79	10.00	41.04	39.00
38236	Columbia Phosphate (Low Grade)	Baltimore	1.25	1.00			1.27		8.74	8.00	23.62	20.00
38298	Eastern Shore Special	Baltimore	4.52	5.00			2.92		9 08	8.00	50.95	52.00
38231	English Compound	Baltimore	1.28	1.00	1.92	1.00	.70		8.78	8.00	33.29	25.00
38237	Excelsior Mixture	Baltimore	2.29	2.00			1.85		9.63	10.00	33.51	31.00
38282	Farmers IXL Fertilizer	Baltimore	2.44	2.00	2.24	2.00	.32		8.61	8.00	43.77	38.00
38261	5-8-3 Fertilizer	Baltimore	5.14	5.00	3.32	3.00	.52		8.37	8.00	70.49	67.00
38287	5-6-0 Fertilizer	Baltimore	5.04	5.00			1.67		5.58	6.00	49.36	49.00
38318	1-8-3 Fertilizer	Baltimore	1.16	1.00	3.64	3.00	1.30		8.98	8.00	41.47	35.00
38373	½-7-2 (Low Grade)	Baltimore	.75	.25	1.72	2.00	1.12		8.51	7.00	27 82	22.50
38262	Oriental Guano	Baltimore	1.81	1.00			1.25		11.69	10.00	32.52	23.00
38379	Phosphate and Potash	Lothian			1.92	2.00	2.50		9.47	10.00	24.31	25.00
38188	Special Guano	Baltimore	7.17	7.00			1.12		9.81	8.00	72.53	68.00
	M. P. Hubbard & Co., Inc., Balto., Md.											
26605	Acme 1-8-4	Baltimore	1.25	1.00	3.12	4.00	1.30		8.90	8.00	39.47	40.00
38358	Big Jim Compound (Low Grade)	Conowingo	.51	.50	1.02	1.00	.30		8.02	8.00	21.33	21.00
38238	Celebrated Phosphate	Baltimore	2.06	2.00	2.10	2.00	1.20		8.24	8.00	39.82	38.00
38319	Dissolved Phosphate 16%	Baltimore					1.15		16.19	16.00	24.52	24.00
38239	Domino Compound	Baltimore	2.02	2.00	1.04	1.00	1.10		8.53	8.00	34.60	33.00
38374	Ever Ready Compound	Baltimore	1.14	1.00			1.47		10.20	10.00	25.01	23.00
38341	Excelsior	Baltimore	1.13	1.00	1.92	2.00	1.00		9.23	8.00	32.89	30 00
38205	Fish Mixture	Baltimore	4.40	5.00			3.00		9.13	8.00	50.10	52.00
38267	Fish and Potash Mixture (Low Grade)	Baltimore	.26	.25	1.16	1.00	.72		6.93	7.00	18.57	17.50
38342	Good and Cheap Compound	Baltimore	1.28	1.00	1.94	1.00	1.25		8.68	8.00	33.46	25.00
38320	Soluble Phosphate 14%	Baltimore					1.32	1.00	14.48	14.00	21.95	21.20

No.	Name and Address of Manufacturer and Name of Fertilizer	Place of Sampling (and Senders initials when not Sampled by the College Agent.)	NITROGEN Calculated as AMMONIA.		POTASH. K_2O.		PHOSPHORIC ACID.				Comparative Value Per Ton Found.	Comparative Value Per Ton Guaranteed.
							Insoluble.		Available.			
			Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.		
	M. P. Hubard & Co., Inc., Balto., Md.											
38434	8 and 2 Special (Low Grade)....	Baltimore.....	.....	.....	1 40	2 00	.27	.....	7.65	8.00	18.53	22.00
38375	Special 4-8-0 (Low Grade).....	Baltimore	1.02	1.00		.....	1 00	.....	7.72	8.00	20.14	20.00
38299	Special 2-8-3	Baltimore.....	1.84	2.00	3.02	3.00	1.70	.....	8.02	8.00	42.53	43.00
38223	Special 5-7-3	Baltimore.....	5.55	5.00	3.24	3.00	2.87	.....	6.69	7.00	71.79	65.50
26616	Special 4-8-4	Baltimore.....	4.01	4 00	4.20	4.00	1.60	.....	8.60	8.00	66.62	64.00
38224	Union Jack Fertilizer (Low Grade)	Baltimore.....	2.24	2.00	.....	.....	2.87	.....	9.88	8.00	33.89	28 00
	Huston, Darbee & Co., Seaford, Del.											
26534	Sweet Potato Mixture.....	Federalsburg	1.63	2.00	4.04	4.00	.87	.....	11.59	9.00	51.46	49.50
	Koller Fertilizer Co., Seitzland, Pa.											
38309	Ammoniated Phosphate	Parkton	1.23	1.00	.68	1.00	1.10	.....	8 27	8.00	26.09	25.00
38310	Electric Phosphate.....	Parkton.....	.85	.50	.58	.50	1 47	....	10.21	9.00	22.61	20.00
38311	1 and 10 Phosphate	Parkton.....	1.08	1 00			2.90	.....	9.40	10.00	23.90	23.00
38312	Potato Grower Phosphate.....	Parkton.....	1.28	1.00	2.42	2.00	2.35	....	7.26	7.00	34.17	28.50
	Charles G. Kriel, Balto, Md.											
33480	Tankage.....	Baltimore.....	6.81	6.50	.....	.....	*6.85	*6.50	....	.....	58.59	55.90
	Lancaster Chem. Co., Lancaster, Pa.											
23550	No. 8 Acid Phosphate	Perryville	....	.....	.....	.....	2.90	1 00	11 60	14.00	17.98	21 20
38910	Economist (Low Grade)	Rising Sun.....	.....	....	.....	.....	4.10	1.00	10 1[illegible]	10.00	15 97	15.20
26551	Grain Special (Low Grade).....	Perryville	.51	.50	.....	.....	3.00	1.00	10.23	10.00	20.63	19.40
38911	Keystone Brand (Low Grade)...	Rising Sun.....	1.03	1.00	.....	.....	2.67	1.00	8.82	8.00	22.54	20.40

38912	Nitrate of Soda	Frenchtown	18.60	18.00							148.80	144.00
38913	Phosphoric Acid Special	Frenchtown					3.90	1.00	13.79	16.00	21.47	24.20
26552	Potato Special	Perryville	1.59	2.00	.36	1.00	2.75	1.00	7.77	9.00	27.28	34.90
26553	Success Brand	Perryville	.75	1.00			3.05	1.00	11.45	12.00	24.40	26.40
38914	Wheat & Grass	Rising Sun	.68	1.00			3.90	1.00	8.90	10.00	20.35	23.40
38915	Wheat Special	Rising Sun	1.74	2.00			3.25	1.00	8.07	10.00	27.33	31.40
	Lister's Agricultural Chemical Wor	**ks. Newark, N. J.**										
38757	Acid Phosphate High Grade	Baltimore					.37		17.60	16.00	26.47	24.00
38784	Atlas Brand Fertilizer 1916	Baltimore	4.95	5.00			.72		8.60	8.00	52.79	52.00
38814	Celebrated Ground Bone (Low Gr'd)	Baltimore	3.41	3.25			6.45	5.00	7.10	7.00	40.51	36.70
38886	Corn & Potato Fertilizer 1916	Baltimore	2.59	2.50	.90	1.00	.75		9.02	8.00	39.05	37.00
38768	Crescent Amm'd. Super Phos.	Baltimore	2.05	2.00			.95		11.40	10.00	33.88	31 00
38796	Excelsior Guano	Baltimore	3.17	3.00			.87		10.56	10.00	41.59	39.00
38751	Fish Brand Fertilizer	Baltimore	1.64	1.50			1.00		11.19	10.00	30.31	27.00
26578	Golden Sheaf 1916 (Low Grade)	Baltimore	.61	.50	1.04	1.00	.70		8.02	8.00	22.39	21.00
38978	Grain & Grass Fertilizer 1916	Baltimore			1.88	2.00	.82		10.70	10.00	25.61	25.00
38797	Harvest Queen	Baltimore	1.52	1.50	1.05	1.00	.92		10.51	10.00	33 55	32.00
38837	1-8-2 Fertilizer	Baltimore	.96	1.00	1.80	2.00	.80		8.96	8.00	30.44	30.00
26531	Lucky Strike Guano (Low Grade)	Baltimore	2 01	2.00			1.02		8.01	8.00	28.51	28.00
38776	Stand Pure Super Phos. of Lime	Baltimore	3.02	3.00	1.05	1.00	.75		10.06	9.00	44.80	42.50
38867	2-8-3 Fertilizer	Baltimore	2.22	2.00	2.72	3.00	.90		9.19	8.00	45.51	43.00
	Martin Fertilizer Co., Phila., Pa.											
38888	Acid Phosphate 16%	Baltimore					.65		16.62	16.00	25.06	24.00
26624	Ammoniated Phosphate (Low Gr'd)	Rising Sun	.87	1.00			3.40		8.08	8.00	20.44	20.00
26633	Ammoniated Phosphate 7-8-0	Baltimore	7.17	7.00			.80		8.29	8.00	70.12	68.00
38868	Ammoniated Phosphate 3-8-0	Baltimore	2.04	3.00			2.92		9.16	8.00	31.23	36.00
38777	Ammoniated Phosphate (L.G.)	Baltimore	2.85	2.00			4.72		10.23	8.00	40.04	28.00
38890	Amoniated Phosphate 2-10-0	Baltimore	1.91	2.00			4.05		11.01	10.00	33.42	31.00
38844	Bull Head Fertilizer	Baltimore	2.66	3.00	1.04	1.00	3.20		8.31	8.00	40.23	41.00
38965	Crop Producer	Baltimore	1.40	1.25			2.55		8.37	10.00	24.78	25.00
26573	Dissolved Organic Comp. (L.Gr.)	Baltimore	1.31	1.25	.76	.50	2.02		8.18	9.00	27.36	26.00
38786	5-7-3 Fertilizer	Baltimore	5.09	5.00	2.96	3.00	1.95		7.98	7.00	68.27	65.50
38966	Potash & Soluble Phos. (L G.)	Baltimore			1.18	1.00	.70		12.21	10.00	24.36	20.00
26527	Pure Bone Meal	Baltimore	4 13	4.50			*24.23	*21.00			47.58	48.60
28916	Pure Dissolved Animal Matter	Rising Sun	2.01	2.00			3.32		10.04	12 00	32.47	34.00
38712	Pure Ground Bone	Baltimore	3.12	3.00			*23.54	*22.90			39.08	37.74

*Total Phosphoric Acid.

No.	Name and Address of Manufacturer and Name of Fertilizer	Place of Sampling (and Senders initials when not Sampled by the College Agent.)	NITROGEN Calculated as AMMONIA.		POTASH. K_2O.		PHOSPHORIC ACID.				Comparative Value Per Ton Found.	Comparative Value Per Ton Guaranteed.
							Insoluble.		Available.			
			Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.		
	Martin Fertilizer Co., Philadelphia, Pa.											
38917	Sure Grower	Rising Sun	1.02	1.00	.36	1.00	3.25	.....	7.65	8.00	22.74	25.00
26591	2-8-3 Fertilizer	Baltimore	1.50	2.00	2.40	3.00	2.60	....	8.08	8.00	37.16	43.00
26519	3-8-3 Fertilizer	Baltimore	2.56	3.00	2.60	3.00	2.82	.....	11.05	8.00	51.19	51.00
	Maryland Guano Co., Balto., Md.											
26525	Acid Phosphate 16% High Grade.	Baltimore	....	....	.....	.....	1.25	...	15.16	16.00	22.99	24.00
26582	Ammoniated Guano	Baltimore	1.21	1.00	2.16	1.00	2.07	.....	8.93	8.00	34.71	25.00
38716	Bell Potash Mixture	Baltimore	.....	.....	3.32	3.00	1.60	.....	11.02	12.00	33.45	33.00
26574	Champion 0-10-2	Baltimore	.....	.....	2.24	2.00	1.40	...	10.87	10.00	27.79	25.00
38717	Corn & Tomato 2-8-2	Baltimore	2.73	2.00	2.70	2.00	1.70	...	9.54	8.00	50.33	38.00
26520	No. 1 Fish Guano. 1-7-1 (Low Gr.)	Baltimore	1.60	1.00	1.08	1.00	1.22	.....	8.82	7.00	31.92	23.50
26526	Standard All Crop Guano	Baltimore	1.67	2.00	.....	.....	1.22	.....	11.56	10.00	31.19	31.00
	Massey & Kilbourne, Chestertown, Md.											
26554	Trustworthy Super Phosphate	Chestertown	2.10	2.00	.....	.....	2.85	...	7.51	10.00	29.21	31.00
	Medford Fertilizer Works, Medford, Md.											
38985	No. 1 Phosphate	Medford	.90	1.00	...	.....	1.85	.....	10.82	10.00	24.17	23.00
38986	No. 2 Phosphate	Medford	1.01	1.00	.86	1.00	1.22	.....	9.76	8.00	27.51	25.00
38987	No. 3 Phosphate	Medford	1.67	2.00	.....	.....	1.82	.....	13.90	12.00	34.94	34.00

	Miller Fertilizer Co., Balto., Md.												
38891	Acid Phosphate 16%	Baltimore					.67		16	16.00	25 57	24.00
26583	Ammoniated Dissolved Bone No. 1	Baltimore	1.83	2.00	2.02	2.00	.85	.50	8.03	8.00	37 53	38.20
38892	Club Brand Fertilizer (Low Gr.)	Baltimore	.55	.50	.53	.5	.70	.5	8.02	8.00	19.61	18.70
38837	Farmers Profit (Low Grade)	Ellicott City	1.83	1.75			.95		9.41	9.00	29.38	27.50
38752	Harvest Queen (Low Grade)	Baltimore	1 57	1.25	1.20	.75	1 00		8.50	8.00	31.71	25.75
26521	No. 1 Special	Baltimore	1.84	2.00			1.55	.5	10.02	10.00	30.37	31.20
38798	Pimlico Brand (Low Grade)	Baltimore	2.87	2.00			1.10		8.46	8.00	36.09	28.20
38893	Potato & Vegetable Grower	Baltimore	1.93	2.00	1.04	1.00	1.60	.50	7.60	8.00	32.68	33.20
38718	Potato & Vegetable Grower	Baltimore	1.76	2.00	1.05	1.0	.9[illegible]	.50	8.62	8.00	32.46	33 20
38869	No. 1 Potato & Vegetable Grower	Baltimore	4.66	4.50	1.48	1 [illegible]	1 0[illegible]	.50	8.31	8.00	57.55	53.20
38959	Pure Ground Raw Bone	Baltimore	5.34	4.50			22. 2	21.0[illegible]			56.11	48.60
38894	Special Tobacco Grower	Baltimore	1.91	2.00	1.0[illegible]	1. [illegible]	1.92	.50	7.66	7.00	32.79	31.70
38753	Standard Phosphate	Baltimore	3.11	3.00	1 6	1.00	1.40		8.04	8.00	45.60	41.00
	J. B. Nichols & Son, Balto., Md.												
38769	Farmers Friend Fertilizer	Baltimore	3.67	4.00	1.60	1.00	2.50		8.69	7.00	51.40	47 50
	G. Ober & Sons Co., Balto., Md												
38881	Acid Phosphate, High Grade	Baltimore					.92		17.59	16.00	26.57	24.00
38899	Avondale Amm'd Dissolved Bone	Baltimore	2.05	2.00	1.10	1.00	2.15		8.75	8.00	35.89	33.00
38956	Electro Compound	Baltimore	1.13	1.00			1.25		10.64	10.00	25.50	23.00
38845	Farmers Mixture	Baltimore	1.16	1.00	1.92	2.00	1.30		10.07	9 00	34.51	31.50
38846	Farmers Standard Amm'd Phos.	Baltimore	1.66	2.00	2.08	2.00	1.35		10.92	9.0[illegible]	40.60	39.50
38821	Fish Bone Mixture	Baltimore	2.71	3.00			1.22		10.54	9.0[illegible]	37.98	37.50
38847	Fish & Potash Compound	Baltimore	1.64	2.00	.96	1.00	1.10		11.08	9.00	.4 9[illegible]	34.50
38838	Golden Seal Tobacco Guano	Baltimore	2.80	3.00	1.08	1.00	1.20		8.71	8.00	41.3[illegible]	41.00
26522	Golden Seal Tobacco Guano	Baltimore	3.21	3.00	1.28	1.00	1.17		10.50	8.00	48.3	41.00
38822	Independ't Amm'd Super-Phos.	Baltimore	1.08	1.00	1.03	1.00	1.12		9.11	8.00	27.91	25.00
38848	Liberty Fish Guano	Baltimore	1.06	1.25			.90		13.92	13.00	29 72	29 50
38823	Royal Fish & Potash Compound	Baltimore	2.08	2.00	1.40	1.00	.97		9.31	9.00	38.00	34.50
38849	Sol. Amm'd Super-Phos. of Lime	Baltimore	2.06	2.00	2.10	2.00	.97		9.63	8.00	41.82	38.00
38725	Special Tobacco Bed Fertilizer	Baltimore	8.44	10.00			1.15		6.25	4.00	77.36	86.00
38900	Special Tobacco & Truck Guano	Baltimore	3.24	4.00			1.25		8.87	8.00	39.73	44.00
38870	Stag Guano	Baltimore	1.86	1.00	3.32	4.00	2.33		8.39	8.00	45.00	40.00
38824	Sun Beam Guano	Baltimore	2.03	2.00			1.15		11.20	10.00	33.50	31.00
38787	Vegetable & Truck Compound	Baltimore	3 91	4.00	2 20	2.00	.95		8.33	8.00	55.16	54.00

No.	Name and Address of Manufacturer and Name of Fertilizer	Place of Sampling (and Senders initials when not Sampled by the College Agent.)	NITROGEN Calculated as AMMONIA.		POTASH. K_2O.		PHOSPHORIC ACID.				Comparative Value Per Ton Found.	Comparative Value Per Ton Guaranteed.
							Insoluble.		Available.			
			Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.		
	Oyler & Spangler, Gettysburg, Pa.											
38988	16%	Emmitsburg	.....	.....	.....	.....	.82	.....	16.87	16.00	25.47	24.00
38989	Special	Emmitsburg	2.25	2.00	.....	.....	.50	.....	12.33	11.00	36.70	32.50
38990	Super Phosphate (Low Grade)	Emmitsburg	.90	1.00	.....	.....	.57	.....	10.03	9.00	22.48	21.50
	Patapsco Guano Co., Balto., Md.											
38799	Baltimore Soluble Phosphate	Baltimore	.....	.....	1.66	2.00	1.22	.....	11.12	11.00	25.22	26.50
38970	Battle Axe Phosphate (Low Gr.)	Baltimore	.....	.....	.....	.....	1.25	.....	13.21	12.00	20.07	18.00
38726	Columbian Guano	Baltimore	3.17	3.00	.96	1.00	.77	.....	10.07	9.00	45.58	42.50
38967	Coon Brand Guano 1916	Baltimore	1.04	1.00	1.02	1.00	1.47	.....	9.46	9.00	28.20	26.50
38770	Farmers Delight (Low Grade)	Baltimore	1.14	1.00	.....	.....	1.30	.....	9.20	8.00	23.44	20.00
38927	Fish Mixture (Low Grade)	Centreville	1.91	2.00	.....	.....	2.00	.....	8.28	8.00	28.50	28.00
38800	5-5-0 Fertilizer (Low Grade)	Baltimore	4.76	5.00	.....	.....	.72	.....	6.01	5.00	47.39	47.50
38719	Golden Crop 1916	Baltimore	2.01	2.00	.....	.....	1.13	.....	11.08	10.00	33.15	31.00
26584	Money Maker 1916	Baltimore	1.47	1.00	1 08	1.00	.85	.....	10.31	8 00	32.97	25.00
26643	Plant Food with Potash	Baltimore	1.06	1.00	2.12	2.00	.80	.....	8.44	8.00	32.06	30.00
38972	Sea Gull Guano	Baltimore	1.13	1.00	.96	1.00	.67	.....	8.43	8.00	26.76	25.00
38979	Soluble Phosphate & Potash	Baltimore	.....	.....	1.88	2.00	.97	.....	10.92	10.00	25 97	25.00
	Patuxent Fish & Oil Co., Solomons, Md.											
38961	Farmers Harvester (Low Grade)	Solomons	1.31	2.00	.22	.50	1.90	.....	8.25	9.00	24.72	32.00
38962	Truckers Joy	Solomons	1.71	3.00	.80	1.00	2.85	.....	8.84	9.00	31.88	42.50
	Peerless Fertilizer Co., Chestertown, Md.											
38928	Fish Mixture (Low Grade)	Chestertown	2.49	2.00	.....	.....	2.32	.....	8.30	8.00	33.30	28.00

38929	Old Reliable (Low Grade).....	Chestertown.....	1.25	1.00	.....	.....	1.70	.....	8.18	8.00	22.95	20.00
	Piedmont-Mt. Airy Guano Co., Bal	**to., Md.**										
38788	Levering's Ammoniated Bone..	Baltimore.....	1.42	1.00	2.30	3.00	1.22	.....	9.28	9.00	37.27	36.50
38918	Levering's Excelsior.....	Federalsburg	.82	1.00	1.16	1.00	1.15	.....	8.49	8.00	25.56	26.00
38895	Levering's Harvest Queen.....	Baltimore.....	.80	1.00	2.18	2.00	1.17	.....	8.04	8.00	29.83	30.00
38825	Levering's Standard (Low Gr.)	Baltimore.....	2.06	2.00	.....	.....	1.50	.....	7.43	8.00	28.23	28.00
38735	Piedmont 16% Acid Phosphate..	Baltimore.....	.....	.....	.....	.....	1.45	.....	16.02	16.00	24.32	24.00
38957	Pied. Acidulated Phos. & Potash	Baltimore.....	.....	.....	2.48	2.00	.95	.....	10.33	10.00	28.09	25.00
38771	Piedmont Blue Ribbon.....	Baltimore.....	3.12	3.00	.....	.....	1.65	.....	10.38	10.00	41.19	39.00
38736	Piedmont Challenge Fertilizer..	Baltimore.....	5.05	5.00	.....	.....	1.05	.....	9.02	8.00	54 35	52.00
38815	Piedmont Climax Fertilizer.....	Baltimore.....	6.72	7.00	.....	.....	2.27	.....	6.07	6.00	63.78	65.00
38737	Pied. Early Vegetable Manure..	Baltimore.....	5.15	5.00	3.30	3.00	2.12	.....	8.26	8.00	70.94	67.00
38789	Piedmont Fish Guano.....	Baltimore.....	1.83	2.00	.....	.....	1.34	.....	10.20	10.00	30.48	31.00
38738	Piedmont 5-6-5 Fertilizer.....	Baltimore.....	5.19	5.00	5.02	5.00	1.92	.....	5.97	6.00	76.35	74.00
38713	Pied. Golden Eagle Fertilizer...	Baltimore.....	2.08	2.00	1.68	1.00	1.75	.....	8.13	9.00	37.94	34.50
38720	Gold Leaf Tobacco Guano (L. G.)	Baltimore	2.05	2.25	.....	.....	.93	.....	7.68	8.50	28.29	30 75
38980	Pied. Gold Star Guano (Low Gr.)	Baltimore.....	2.51	2.50	.....	.....	2.10	.....	8 98	8.00	34 39	32.00
38968	Piedmont Guano for Tobacco ...	Baltimore.....	2.44	2.50	3.24	3.00	1.95	.....	7.45	8.00	47.68	47.00
26592	Pied. H. G. Amm'd Fish & Potash	Baltimore.....	3.02	3.00	3.28	3.00	1.95	.....	8.41	8.00	53.96	51.00
38839	Piedmont Imperial Fertilizer....	Baltimore.....	2.63	3.00	1.06	1.00	1.15	.....	10.12	9.00	41 98	42.50
38739	Pied. Insula Fish Guano (L. G.)	Baltimore.....	.58	.50	2.12	2.00	1.20	.....	8.75	7.00	28.85	24.50
38816	Piedmont Leader Fertilizer.....	Baltimore.....	3.43	4 00	1.04	1.00	1.20	.....	9.66	8.00	48.01	49.00
38871	Pied. Peerless Phosphate (L. G.)	Baltimore.....	1.02	1.00	.....	.....	.70	.....	8.02	8.00	20.47	20.00
26593	Piedmont Phosphate (Low Gr.).	Baltimore.....	1.13	1.00	.....	.....	.90	.....	8.34	8.00	21.91	20.00
26640	Piedmont Plow Brand.....	Bayside.....	2.05	2.00	1.70	2.00	2.50	.....	7.86	8.00	37.69	38.00
38826	Piedmont Progress Fertilizer....	Baltimore.....	4.28	5.00	.....	....	1.35	.....	7.89	7.00	46.62	50.50
38740	Piedmont Raw & Dissolved Bone	Baltimore.....	3.33	3.00	.....	.....	13.38	5.00	10.02	15.00	47.02	48.50
38790	Pied. Sol. Phos & Potash (L. G.)	Baltimore.....	.....	.....	2.10	2.00	.70	.....	9.47	8.00	24.85	22.00
38817	Piedmont Special Crop Grower..	Baltimore.....	1.01	1.00	.....	.....	1 07	.....	10.48	10.00	24.23	23.00
26586	Pied. Special Fish Guano.....	Baltimore.....	1.50	2.00	1.68	2.00	1.87	.....	10.24	10.00	36.51	41.00
26639	Piedmont Special Fertilizer.....	Baltimore.....	3.48	4.00	.....	.....	1.70	.....	8.02	8.00	40.55	44.00
38772	Piedmont 2-8-3 Fertilizer.....	Baltimore.....	2.51	2.00	3.12	3.00	1.05	.....	8.83	8.00	49.35	43.00
38828	Piedmont Utility Fertilizer.....	Baltimore.....	1.91	2.00	.....	.....	2.12	.....	10.33	10.00	31.63	31.00
	Pollock Fertilizer Co., Bolto, Md.											
26579	Ammoniated Fertilizer "AAA"	Baltimore.....	3.46	3.00	.....	.....	1.37	.....	10.43	10.00	43.88	39.00
38791	Ammoniated Fertilizer "AA"...	Baltimore.....	2.06	2.00	.....	.....	1.07	.....	11.01	10.00	33.43	31.00

No.	Name and Address of Manufacturer and Name of Fertilizer	Place of Sampling (and Senders initials when not Sampled by the College Agent.)	NITROGEN Calculated as AMMONIA.		POTASH. K_2O.		PHOSPHORIC ACID.				Comparative Value Per Ton Found.	Comparative Value Per Ton Guaranteed.
							Insoluble.		Available.			
			Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.		
	Pollock Fertilizer Co., Balto., Md.											
38882	Corn, Wht. & Tomato Guano 1916	Baltimore	1.06	1.00	1.03	1.00	1.05	.....	8.67	8.00	27.06	25.00
38818	Grain Special (Low Grade)	Baltimore	2.03	2.00	.....	.....	1.90	.....	8.84	8.00	30.26	28.00
38721	Our Brand Guano (Low Grade)	Baltimore	1.09	1.00	...	.....	1.35	.....	8.05	8.00	21.34	20.00
38872	War Brand (Low Grade)	Baltimore	.65	.50	...	.....	.65	.....	8.23	8.00	17.81	16.00
	Ramsburg Fertilizer Co., Frederick, Md.											
38991	Ammoniated Bone Phosphate	Frederick	1.30	1.00	.....	.....	2.60	.....	11.55	11.00	28.77	24.00
38992	Corn & Potato Fertilizer	Frederick	1.25	1.21	.....	.....	2.05	.....	12.34	10.00	29.33	24.68
38993	Excelsior Plant Food	Frederick	2.27	2.00	.....	.....	2.92	.....	10.47	10.00	35.04	31.00
38994	Queen (Low Grade)	Frederick	.51	.50	.....	.....	2.95	.....	13.15	10.00	24.99	19.00
38995	Super Phosphate	Frederick	.....	.....	.....	.....	1.40	.....	18.05	16.00	27.36	24.50
	Rasin-Monumental Co., Balto., Md.											
26636	Rasin's 16% Acid Phosphate	Ellicott City	.....	.....	.....	.....	.55	.....	16.35	16.00	24.64	24.00
38792	Rasin's Amm'd Super Phosphate	Baltimore	4.91	5.00	.....	.....	.70	1.00	8.89	8.00	52.90	52.40
38724	Rasin's Crop Grower	Ellicott City	1.18	1.00	1.08	1.00	1.30	.....	8.49	8.00	28.10	25.00
38973	Rasin's Empire Guano	Baltimore	2.03	2.00	1.94	2.00	1.57	1.00	8.39	8.00	39.16	38.40
26594	Rasin's Fish, Bone & Potash	Baltimore	2.18	2.00	1.06	1.00	3.20	1.00	7.01	8.50	34.54	34.15
38793	Rasin's Fish Mixture	Baltimore	1.33	1.00	.....	.....	1.40	1.00	10.11	10.00	26.37	23.40
38794	Rasin's Fish & Bone Guano	Baltimore	1.76	2.00	.....	.....	2.05	.....	12.39	11.00	33.49	32.50
38763	Rasin's Potato & Veg. Fertilizer	Baltimore	4.47	4.00	.....	.....	.55	1.00	10.29	8.00	51.42	44.40
26523	Rasin' Royal Fish, Bone & Pot.	Baltimore	1.83	2.00	3.02	3.00	2.30	1.00	8.22	8.00	42.99	43.40
38901	Rasin's R'yl Super Phos. (L. G.)	Baltimore	.53	.50	.....	.....	1.22	1.00	8.92	8.00	18.11	16.40

38958	Rasin's Sea Wall Spec. (L. G.)	Baltimore	.....	.....	.....	.....	1.02	.....	11.59	10.00	17.59	15.00
38829	Rasin's Spec. Alka. Mix. (L. G.)	Baltimore	.....	.....	3.07	3.00	.57	.....	9.26	8.00	29.35	27.00
38902	Rasin's Special Fish Mixture	Baltimore	1.16	1.00	.....	.....	1.15	1.00	11.43	10.00	26.89	23.40
38755	Rasin's Truck Amm'd Super Phosphate	Baltimore	4.88	5.00	.....	.....	1.17	.....	9 16	8.00	53.49	52 00
38850	Rasin's Truckers Mixture	Baltimore	7.25	7.00	5.36	5.00	.57	1.00	7.13	6.00	95.73	90.40
38714	Rasin's United Grain Grower	Baltimore	1.09	1.00	2.20	2.00	1.40	1.00	8.32	8.00	32.76	30.40
38727	William Penn Crop Grower	Baltimore	1.14	1.00	1.10	1.00	1.15	1.00	8.40	8.00	27.68	25.40
	Reindollar Co., Taneytown, Md.											
38996	Ammoniated Phosphate	Taneytown	2.01	2.00	.....	.....	1.02	.....	13.80	12.00	37.19	34.00
38997	12-2	Taneytown	.....	.....	2.12	2.00	.10	.....	12.81	12.00	29.84	28.00
	W. E. Robinson & Co., Bel Air, Md.											
26555	Veg. & Grain Grower (Low Gr.)	Fallstown	2.15	2.00	.48	.25	1.07	.....	7.28	8.00	30.95	29.25
38873	Veg. & Grain Fertilizer	Baltimore	1.96	2.00	1.04	1.00	1 32	.....	8.51	8.00	34.18	33.00
	F. S. Royster Guano Co., Balto., Md.											
38715	Acid Phosphate 14%	Baltimore	.....	.....	.....	.....	1.45	.....	14.81	14.00	22.51	21.00
26637	Acid Phosphate 16% High Grade	Rockville	.....	.....	.....	.....	1.30	.....	16.24	16.00	24.62	24.00
38756	Alaska 7% Amm'd Phosphate	Baltimore	5.67	7.00	.....	.....	1.42	.....	8.38	8.00	58.50	68.00
26595	Alrite Ammoniated Phosphate	Baltimore	2.93	2.00	.....	.....	1.80	.....	11.43	12.00	41.31	34.00
26596	Angelus Truck Guano	Baltimore	4.79	5.00	3.02	3.00	2.50	.....	8.18	8.00	66.69	67.00
38851	Bangup Guano	Baltimore	1.77	2.00	3.06	5.00	1 65	.....	8.82	8.00	43.35	53.00
38773	Bee Line Spec. Amm'd Phos.	Baltimore	10.07	10.00	.....	.....	1.10	.....	6.79	6.00	91.19	89.00
26597	Brilliant Grain Guano	Baltimore	2.44	2.00	3.80	4.00	2.43	.....	10.64	10.00	55.45	51.00
38874	Cloverdale Potash Mixture	Baltimore	.....	.....	1.94	2.00	1.20	.....	10.37	10 00	25.50	25.00
38778	C. B. Fish Amm'd Phos. (L. G.)	Baltimore	1.76	2.00	.....	.....	1.27	.....	8.39	8.00	27.18	28.00
38974	Corn & Oats Amm'd Phos. (L. G.)	Baltimore	1.03	1.00	.....	.....	1.45	.....	8.29	8.00	21.26	20.00
38801	Cuckoo Crop Guano	Baltimore	1.28	1.00	1.08	1.00	1.07	.....	8.32	8.00	28.55	25.00
38757	Defender Ammoniated Phos.	Baltimore	4.08	4.00	.....	.....	1.12	.....	8.62	8.00	46.02	44.00
38795	Dreadnought Guano	Baltimore	1.81	2.00	1.74	2.00	1.12	.....	8.79	8.00	36.82	38.00
26518	Fine Ground Bone Meal	Rockville	2.59	3.00	.....	.....	*26.30	*22.50	.....	.....	36.50	37.50
38802	Fish, Flesh & Fowl Guano	Baltimore	1.88	2.00	2.84	3.00	2.07	.....	7.84	8.00	41.83	43.00
38774	Fish & Potash	Baltimore	1.84	2.00	1.10	1.00	.97	.....	9 01	8.00	34.13	33.00
38903	Flamingo Amm'd Phosphate	Baltimore	2.66	2.50	.....	.....	2.22	.....	12.24	12.00	40.53	38.00
26528	Innovation Amm'd Phosphate	Baltimore	2.58	3.00	.....	.....	2.35	.....	6.58	8.00	31.45	36.00
38981	Old Glory Potash Mix (Low Gr.)	Baltimore	.....	.....	1.90	1.00	1.00	.....	9.55	10.00	24.03	20.00
38841	Penguin Amm'd Phosphate	Baltimore	2.10	2.00	.....	.....	1.10	.....	10.02	10.00	32.27	31.00
26647	Prime Fish Amm'd Phos. (L. G.)	Baltimore	2.16	2.00	.....	.....	1.07	.....	9.39	8.00	31.80	28.00

*Total Phosphoric Acid.

No.	Name and Address of Manufacturer and Name of Fertilizer	Place of Sampling (and Senders initials when not Sampled by the College Agent.)	NITROGEN Calculated as AMMONIA.		POTASH. K_2O.		PHOSPHORIC ACID.				Comparative Value Per Ton Found.	Comparative Value Per Ton Guaranteed.
							Insoluble.		Available.			
			Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.		
	F. S. Royster Guano Co., Balto., Md.											
38852	Pure Raw Bone Meal	Baltimore	4.37	4.50			*23.59	*21.50			49.11	48.90
38853	Rational Guano	Baltimore	1.19	1.00	2.96	4.00	2.07		7.91	9.00	37.02	40.00
38879	Royal Blue Amm'd Phosphate	Baltimore	1.19	1.00			1.40		9.77	10.00	24.74	23.00
38775	7% Ammoniated Phosphate	Baltimore	6.86	7.00			1.60		7.60	6.00	66.92	65.00
38853	True Blue Guano	Baltimore	4.50	4.00	2.03	3.00	3.05		7.15	8.00	58.10	59.00
26641	Wheat, Oats & Barley	Baltimore	1.06	1.00	1.60	2.00	1.26		7.51	8.00	28.25	30.00
38896	Wonder Worker Guano	Baltimore	1 91	1.00	2.78	3.00	1.00		7.91	8.00	41 45	35.00
	Scott Fertilizer Co., Elkton, Md.											
3893	Ammoniated Base	Elkton	2.27	2.00			1.15		12.05	12.00	36.70	34.00
38932	Ammoniated Super Phosphate	Elkton	3.16	4.00			1 72		10.79	10.00	42.16	47.00
38933	Crop Grower (Low Grade)	Elkton	2.05	2.00			1.70		11.15	8.00	33.81	28.00
38934	Grain Grower	Elkton	1.08	1.00			.72		11.04	10.00	25.49	23.00
38935	Ground Raw Bone	Elkton	4.56	4.50			*21.52	*21.00			49.39	48.60
38936	Pennsylvania Potato Grower	Elkton	1.28	1.00	2.22	2.00	1 45		8.42	8.00	34.55	30.00
38937	Potato Grower	Elkton	1.84	2.00	1.36	1.00	1.25		11.29	10.00	38.96	36.00
38938	Soluble Phosphate & Potash 12-2	Elkton			2.13	2.00	1.45		12.34	12.00	29.70	28.00
38939	Sure Growth Super Phosphate	Coloro	2.02	2.00	1.12	1.00	.75		8 42	8.00	34.69	33.00
38939	Tip Top Soluble Phosphate	Elkton					.57		17.94	16.00	27.02	24.00
38940	Victory Brand	Elkton	2.01	2 00	3.38	3.00	1.77		8.65	8.00	46.67	43.00
38941	Wheat & Grass Grower (L. G.)	Elkton	.84	.50	1.12	1.00	1.47		10.13	10.00	28.11	24.00

	Sears, Roebuck & Co., Chicago, Ill.											
26625	Acid Phosphate 20%	Baltimore					.10		18.71	20.00	28.09	30.00
26529	2-10-0 Fertilizer	Baltimore	2.54	3.00			1.67		11.24	10.00	37.85	39.00
	Standard Guano Co., Balto., Md.											
26627	Acid Phosphate, High Grade	Baltimore					.70		16.77	16.00	25.30	24.00
26530	Harvest Queen	Baltimore	1.57	1.00			1.60	.50	12.14	10.00	31.41	23.20
38469	Truckers Reliance	Baltimore	6.07	6.00			2.62		10.07	10.00	64.72	63.00
26588	2-8-5 Fertilizer	Baltimore	2.06	2.00	5.12	5.00	2.60		8.56	8.00	55.96	53.00
38982	2-8-3 Fertilizer	Baltimore	2.01	2.00	3.32	3.00	3.80		8.76	8.00	47.34	43.00
	W. H. Street & Co., Fallston, Md.											
26556	Acid Phosphate	Fallston					.07	.50	15.39	16.00	23.10	24.10
26557	Ammoniated Dissolved Bone	Fallston	1.66	1.50	1.20	1.00	1.10	.50	9.26	9.00	33.61	30.70
26558	Animal Compound	Fallston	2.80	2.50			1.30	.50	10.02	10.00	37.95	35.20
26559	Standard (Low Grade)	Fallston	1.08	1.00			.65	.50	8.02	8.00	20.93	20.20
	Superior Guano Co., Balto., Md.											
38804	Acid Phosphate 14%	Baltimore					1.82		13.37	14.00	20.42	21.00
38728	Acid Phosphate 16%	Baltimore					.40		16.07	16.00	24.19	24.00
38960	Ammoniated Dissolved Bone	Baltimore	1.38	1.25			2.87		10.17	10.00	27.45	25.00
38758	Ammoniated Phosphate & Pot.	Baltimore	1.08	1.00	2.06	2.00	2.02		8.71	8.00	32.82	30.00
26628	Big Crop Grower	Preston	1.95	2.00	1.90	2.00	3.20		8.76	8.00	39.52	38.00
38730	Blood, Bone & Potash	Baltimore	3.79	5.00	1.68	1.00	1.27		8.04	8.00	51.29	57.00
26598	Bone & Dissolved Bone	Baltimore	2.53	2.50			9.30		10.02	10.00	38.99	35.00
38819	Buyers Mixture	Baltimore	4.44	4.00			1.10		9.10	10.00	49.61	47.00
38830	Buyers Mixture	Baltimore	5.46	5.00			1.95		9.37	8.00	58.52	52.00
38805	Buyers Mixture	Baltimore	1.16	1.00	2.74	3.00	1.65		9.02	9.00	37.17	36.50
26630	Buyers Mixture	Baltimore	2.47	3.00	1.72	2.00	1.45		7.32	8.00	39.92	46.00
38975	Buyers Mixture (Low Grade)	Baltimore	1.77	2.00			1.47		11.73	8.00	32.35	28.00
38855	Buyers Mixture	Baltimore	2.05	2.00			.52		11.75	10.00	34.24	31.00
38857	Corn & Tomato Guano (Low Gr.)	Baltimore	.75	.50	1.20	1.00	1.37		9.85	8.00	27.33	21.00
38856	Crop Producer	Baltimore	1.19	1.00	1.14	1.00	2.00		8.89	8.00	29.36	25.00
38759	Dissolved Bone	Baltimore	2.01	2.00			1.37		11.88	10.00	34.45	31.00
38858	Fish Mixture	Baltimore	1.60	2.00			1.17		12.11	10.00	31.44	31.00
26587	Fruit Special	Baltimore	1.77	2.00	5.88	5.00	3.30		7.86	8.00	56.67	53.00
38859	Half & Half Fertilizer (L. G.)	Baltimore			1.32	1.25	1.52		8.01	8.00	18.92	18.25
38 65	Potato Special	Baltimore	4.93	5.00	3.04	3.00	2.55		5.26	7.00	63.55	65.50
26648	Special Mixture	Baltimore	4.97	5.00			1.70		7.79	6.00	52.13	49.00

*Total Phosphoric Acid.

No.	Name and Address of Manufacturer and Name of Fertilizer	Place of Sampling (and Senders initials when not Sampled by the College Agent.)	NITROGEN Calculated as AMMONIA.		POTASH. K_2O.		PHOSPHORIC ACID.				Comparative Value Per Ton Found.	Comparative Value Per Ton Guaranteed.
							Insoluble.		Available.			
			Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.		
	Superior Guano Co., Balto., Md.											
38742	Special Mixture	Baltimore	4.27	5.00	.....	.....	1.42	.....	8.94	8 00	48 14	52.00
38743	Special Mixture	Baltimore	4.44	4.00	.....	...	1.32	.....	9.20	8.00	49.85	44.00
38732	Special Mixture	Baltimore	5.32	4.00	.....	.....	2.92	.....	8.19	6.00	56 02	41.00
38733	Special Mixture (Low Grade)	Baltimore	3.52	3.00	.....	.....	1.50	.....	8.09	6.00	40.90	33.00
38780	Special Mixture Fertilizer	Baltimore	3.31	4.00	2.20	2.00	2.22	.....	5.65	6.00	46.85	51.00
	Swift & Co., Balto., Md.											
26560	Ammoniated Phosphate 1-10	North East	1.13	1.00	.....	.....	.70	.....	9.66	10.00	23.81	23.00
38781	Garden City 14% Acid Phosphate	Baltimore	.....	.....	.....	.....	1.17	.....	14.47	14.00	21.94	21.00
38760	Acid Phosphate 16% High Grade	Baltimore	.....	.....	.....	.....	1.52	.....	16.02	16.00	24.33	24.00
38806	Clay Soil Special	Elkridge	1.81	2.00	.....	.....	1.70	.....	13.06	12.00	34.75	34.00
26599	Complete Trucker 5-7-3	Baltimore	4.04	5.00	3.12	3.00	1.77	.....	7.63	7.00	60.08	65.50
26576	Farmers Favorite Fertilizer	Baltimore	2.02	2.00	1.04	1.00	2.17	.....	9.79	9.00	36.92	34.50
38807	Grain Fertillzer	Elkridge	.84	1.00	2 02	2.00	1.05	.....	8.01	8.00	29.26	30.00
26589	High Grade Special 3-12-3	Baltimore	2.95	3.00	3.04	3.00	1.15	.....	12.24	12.00	57 62	57.00
38831	Red Steer Fertilizer	Baltimore	2.15	2.00	1.88	2.00	1.03	.....	10.48	8.00	42.73	38.00
38860	Reliable Grain Fertilizer	Baltimore	1.11	1.00	.66	1.00	1.05	.....	7.72	8.00	24.18	25.00
38820	Special "A" Fertilizer 3-8-0	Baltimore	2.87	3.00	.....	.....	.75	.....	8.30	8.00	35.71	36.00
38808	Special Corn Grower	Elkridge	1.52	2.00	.....	.....	1.68	.....	11.71	10.00	30.40	31.00
38861	Special Phosphate & Potash 10-2	Baltimore	.....	.....	1.88	2 00	1.72	.....	11.19	10.00	26.53	25.00
38862	Special Truck Fertilizer	Baltimore	5.60	5.00	.....	.....	1.35	.....	7.03	8.00	55.89	52.00
26581	Standard Potato Fertilizer 2-8-3	Baltimore	2.18	2.00	3.14	3.00	2.30	.....	8.06	8.00	46.15	43.00
38766	3-8-0 Fertilizer	Baltimore	3.16	3.00	.....	.....	1.15	.....	10.01	8.00	40.76	36.00

38863	Trucking Compound	Baltimore	7.41	7.00	.....	.....	3.32	.....	7.25	6.00	71.49	65.00
38809	Truck & Vegetable Fertilizer	Elkridge	2.30	2.00	.76	1.00	2.20	.....	9.76	8.00	37.72	33.00
38782	Virginia Potato Grower	Baltimore	5.14	5.00	.....	.....	1.75	.....	6.70	7.00	51.87	50.50
38832	Wheat & Rye Fertilizer (L. G.)	Baltimore	2.05	2.00	.....	.....	1.05	.....	8.77	8.00	29.98	28.00
	Tanner Hide & Tallow Co., Hagerstown, Md.											
38998	Bone Phosphate (Low Grade)	Hagerstown	2.20	2.00	.....	.....	.20	4.00	15.74	8.00	41.29	29.60
38999	Tankage (Low Grade)	Hagerstown	5.96	5.00	.....	.....	.....	.....	.....	.....	47.65	40.00
	H. S. Taveau & Co., Balto., Md.											
38963	Allerton Guano	Hughesville	1.02	1.00	2.05	2.00	.75	.....	8.86	8.00	32.00	30.00
38976	Bone Compound	Baltimore	1.09	1.00	.....	.....	1.22	.....	10.85	10.00	35 49	23.00
38883	Florida Phosphate	Baltimore	.....	.....	.....	.....	.70	.....	14.49	14.00	21.88	21.00
38833	Pride of Maryland	Baltimore	1.02	1.00	.96	1.00	.87	.....	10.64	10.00	29.27	28.00
38884	Pride of Virginia	Baltimore	1.02	1.00	1.04	1.00	.95	.....	8 23	8.00	26.09	25.00
38905	Special Compound	Baltimore	2.24	2.00	.....	.....	1.30	.....	10.24	10.00	33.80	31.00
38964	Special Compound No. 2	Hughesville	1.11	1.00	1.06	1.00	1.20	....	8.86	8 00	27.95	25.00
38897	Sweet Potato Manure	Baltimore	2.01	2.00	1.20	1.00	1.22	.....	10.58	9.00	38.44	34.50
38877	Wheat, Corn & Oats	Baltimore	.....	.....	2.08	2.00	1.07	.....	11.95	11.00	28 54	26.50
	Thomas & Co., Frederick, Md.											
38701	Phosphate 16%	Middleburg	.....	.....	.....	.....	.50	.....	16.56	16.00	24.94	24.00
38702	Corn & Potato Fertilizer	Walkersville	2.30	2.00	.....	.....	1.60	.....	10.13	10.00	34.24	31.00
38703	Corn & Potato	Middleburg	1.27	1.25	.....	.....	1.85	1.02	9.31	10.00	24.87	25.41
38704	Crop Producer (Low Grade)	Middleburg	1.13	1.00	.....	.....	1.65	.52	8.46	8.00	22.39	20.21
	I. P. Thomas & Son Co., Philadelphia, Pa.											
38810	Tip Top Fertilizer	Annapolis	3.43	3.00	1 20	1.00	2.95	.....	9.29	8.00	48.56	41.00
38811	Wheat & Corn Guano	Annapolis	1.83	2.00	.....	.....	1.75	.....	10.87	10.00	31.65	31.00
	W. B. Tilghman Co., Salisbury, Md.											
26561	Acid Phosphate High Grade	Berlin	.....	.....	.....	.....	.82	.....	17.26	16.00	26.05	24.00
38942	Corn & Clover (Low Grade)	Berlin	.36	.33	.....	.....	.97	.....	13.65	13.00	23.75	22.14
38944	Early Truck Guano	Preston	4.93	5.00	.....	....	1.60	.....	10.04	8.00	55.14	52.00
38945	Fish-Bone Phosphate Mixture	Preston	.96	1.00	.....	.....	1.82	.....	12.96	11.00	27.85	24.50
38946	Mixture "B"	Hebron	3.82	4.00	.....	.....	1.42	.....	10.76	9.00	47.27	45.50
38947	Potato Fertilizer	Salisbury	3.17	3.00	.....	.....	1.25	.....	9.94	9.00	40.77	37.50
38948	Potash "B" Mixture	Salisbury	4.27	4.00	3.20	3.00	1.82	.....	8.68	8.00	63.91	59.00
38949	7% Guano	Salisbury	7.05	7.00	....	....	1.22	.....	7.79	6.00	68.58	65.00
26562	Special Fish for Sweet Potatoes	Salisbury	2.42	2.00	4.8	5.00	2.20	.....	8.16	7.00	56.88	51.50
26563	Special Mixture (Low Grade)	Berlin	.56	.33	.....	.....	1.30	.....	13.20	13.00	24.80	22.14

No.	Name and Address of Manufacturer and Name of Fertilizer	Place of Sampling (and Senders initials when not Sampled by the College Agent.)	NITROGEN Calculated as AMMONIA.		POTASH. K_2O.		PHOSPHORIC ACID.				Comparative Value Per Ton Found.	Comparative Value Per Ton Guaranteed.
							Insoluble.		Available.			
			Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.		
	W. B. Tilghman Co., Salisbury, Md.											
38950	Special Tomato Potash Mixture.	Preston	2.22	2.00	3.20	3.00	2.37	.....	8.25	8.00	47.29	43.00
38951	Standard Fish Mixture	Preston	2.01	2.00	.....	.....	2.02	.....	11.77	10.00	34.55	31.00
26564	Sweet Potato Potash Mixture	Salisbury	2.76	3.00	3.38	3.00	2.25	.....	8.27	8.00	52.29	51.00
38952	Tomato Potash Mixture	Salisbury	2.27	2.00	3.24	3.00	2.66	.....	8.02	8.00	47.45	43.00
	J. E. Tygert Co., Philadelphia, Pa.											
26565	Acid Phosphate	Bel Air	.....	.....	.....	.....	1.02	.....	16.20	16.00	24.50	24.00
38920	Ammoniated Fertilizer	Bel Air	1.08	1.00	.....	.....	1.00	.....	10.97	10.00	25.50	23.00
38921	Golden Harvest Phosphate	Bel Air	1.16	1.00	1.06	1.00	1.32	.....	9.33	8.00	29.11	25.00
38885	Great Advancer Phosphate	Baltimore	3.86	4.00	.....	.....	1.32	.....	10.16	10.00	46.65	47.00
26566	Neptune Fish Compound (L. G.)	Bel Air	1.06	1.00	1.04	1.00	1.12	.....	7.17	7.00	24.89	23.50
	J. Tyson & Son, Frederick, Md.											
38705	Acid Phosphate	Frederick	.....	.....	.....	.....	2.07	.....	14.83	16.00	22.66	24.00
38707	Corn & Potato Fertilizer	Frederick	.87	1 00	.....	.....	1.20	.....	10.12	10.00	22 62	23.00
	E. S. Valliant & Son, Church Hill, Md.											
38878	Acid Phosphate 16%	Baltimore	.....	.....	.....	.....	.32	.....	15.81	16.00	23.78	24.00
38879	Diamond	Baltimore	2.02	2.00	2.84	3.00	1.25	.50	8.86	8.00	44.15	43.20
38880	Favorite	Baltimore	2.35	2.00	.....	.....	1.60	.50	10.15	10.00	34.67	31.20
38898	Harvest	Baltimore	2 10	2.00	2.46	2.00	1.55	.50	8.28	8.00	42.14	38.20
26585	Ideal	Baltimore	1.93	1.00	1.60	2.00	1.22	.50	9.46	9.00	38.12	31.70
38864	Produce	Baltimore	3.67	4.00	.....	.....	.60	.50	8.93	8.00	43.00	44.20

38865	Royal	Baltimore	3.28	3.00			.65	.50	9.38	8.00	40.57	36.20
38866	Winner	Baltimore	1.13	1.00			1.22	.50	10.64	10.00	25.49	23.20
	W. H. Valliant & Bro., Bellevue, Md.											
26567	Acid Phosphate	Bellevue					1.30		17.03	16.00	25.81	24.00
26568	Crab Phosphate (Low Grade)	Bellevue	2.64	2.00			.30		1.93	2.00	24.14	19.00
	Virginia-Carolina Chemical Co., Richmond, Va.											
38722	Acid Phosphate 14%	Baltimore					.65		15.30	14.00	23.08	21.00
38906	Corn & Grain Grower (Low Gr.)	Baltimore	.72	.50	1.68	2.00	1.42	1.00	9.18	8.00	28.50	26.40
26590	Fish, Bone & Potash	Baltimore	2.04	2.00	3.18	3.00	2.85	1.00	7.35	8.00	44.38	43.40
38834	Fish & Bone Mixture	Baltimore	1.96	2.00			4.35		11.92	11.00	35.30	32.50
38723	Special Fish Preparation	Baltimore	1.19	1.00			1.05	1.00	10.59	10.00	25.83	23.40
38835	Standard Crop Grower	Baltimore	1.76	2.00	1.92	2.00	1.67		8.90	8.00	37.70	38.00
	S. L. Webster & Son, Cambridge, Md.											
38907	Fish Mixture	Baltimore	1.48	2.00			1.12		11.50	10.00	29.54	31.00
38953	Fish & Bone	Cambridge	1.23	1.50			1.05		11.86	10.00	28.05	27.00
26569	Our Fish & Bone	Cambridge	1.28	1.50			.35		11.19	10.00	27.17	27.00
38954	Our Special Make	Cambridge	.72	1.00			1.12		11.33	10.00	23.21	23.00
38955	Royal Trucker	Cambridge	2.20	3.00			2.35		11.02	8 00	35.07	36.00
26570	Tankage Potash Mixture	Cambridge	.80	1.00	1.12	1.00	.87		10.93	9.00	28.75	26.50
	Westminster Fertilizer Co., Westminster, Md.											
38708	Governor	Westminster	1.18	1.50			1.35		8.69	11.00	23.02	28.50
38709	Leader	Westminster	.84	1.00			.85		9.35	10.00	21.09	23.00
38710	Super "A" (Low Grade)	Westminster	1.21	1.00			1.15		10.49	9.00	25.88	21.50
	H. W. Whistler, Bel Air, Md.											
38977	Fish, Bone & Potash (Low Gr.)	Baltimore	.96	.50	.52	.25	1.05		9.85	8.00	25.48	17.25
	F. M. Wilson & Co., Pocomoke City, Md.											
38922	Ammoniated Super Phosphate	Pocomoke	1.40	1.50			2.07		13.65	12.00	32.51	30.00
26626	Favorite Truck Fertilizer	Pocomoke	3.34	4.00			1.65		10.78	10.00	43.85	47.00
	Robert A. Wooldridge Co., Balto., Md.											
26532	Acid Phosphate 16% High Grade	Baltimore					1.42		16.27	16.00	24.69	24.00
38783	American Potash Mixture	Baltimore			1.72	2.00	1.30		9.89	10 00	23.96	25.00
38745	Basic Lime Phosphate (L. G.)	Baltimore					2.75	1.00	12.36	13.00	19.09	19.70
38812	Benefactor Trucker	Baltimore	4.66	5.00			.72		8.60	8.00	50.47	52.00
38843	Common Sense Super Phosphate	Baltimore	4.04	4.00			.87		11.37	10.00	49.73	47.00

No.	Name and Address of Manufacturer and Name of Fertilizer	Place of Sampling (and Senders initials when not Sampled by the College Agent.)	NITROGEN Calculated as AMMONIA.		POTASH. K_2O.		PHOSPHORIC ACID.				Comparative Value Per Ton Found.	Comparative Value Per Ton Guaranteed.
							Insoluble.		Available.			
			Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.		
	Robert A. Wooldridge Co., Balto., Md.											
38746	Dissolved S.C. Phos. (Low Gr.)	Baltimore	....	....	....	....	.75	.....	13.39	12.00	20.24	18.00
26524	Double Quick Phosphate 1916	Baltimore	2.61	2.00	1.04	1.00	1.15	.....	7.81	8.00	38.26	33.00
26577	Fine Ground Bone	Towson	3.12	3.00	....	.....	*24.39	*22.88	.....	.....	39.59	37.73
38813	First Prize Truck	Baltimore	6.57	7.00	.....	.....	.35	.....	9.53	8.00	67.00	68.00
38747	General Crop Grower (Low Gr.)	Baltimore	1.13	1.00	.....	.....	1.47	.....	8.80	8.00	22.83	20.00
38748	H. G. Dissolved Am'md Bone	Baltimore	2.66	2.50	.....	....	1.50	.....	13.01	12.00	41.40	38.00
38749	No. 1 Fish Mixture (Low Grade)	Baltimore	1.13	1.00	.90	1.00	.87	.....	8.22	7.00	26 22	23.50
38750	Old Fidelity Phosphate	Baltimore	1.81	2.00	.....	....	.77	.....	12.90	10.00	34.14	31.00
38761	Royal Crescent Trucker	Baltimore	5.13	5.00	1.88	1.00	.72	.....	7.03	7.00	61.28	55.50
38762	Special Plant Bed Fertilizer	Baltimore	9.58	10.00	....	.....	47	.....	5.43	5.00	84.98	87.50
26575	Triumph Brand	Baltimore	1.42	1.50	4.40	4.00	1.85	.....	7.24	8.00	44.96	44.00
38969	Triumph Phosphate 1916	Baltimore	1.57	1.50	1.05	1.00	1.60	.....	10.29	10.00	33.89	32.00
	Worcester Fertilizer Co., Snow Hill, Md.											
38924	Acid Phosphate 16%	Snow Hill	.....	.....	.....	.....	.67	.....	16.34	16.00	24.64	24.00
38925	Corn Producer	Snow Hill	1.03	1.00	.....	.....	2.70	.....	10.74	10.00	25 43	23.00
26571	Fish, Bone & Potash	Snow Hill	2.12	2.00	2.40	2.00	3.80	.....	8.79	8 00	43 67	38.00
38926	General Crop Grower	Snow Hill	1.52	2.00	.....	.....	2.57	.....	11.60	10.00	30.59	31.00
26572	Special Fish Mixture	Snow Hill	2.85	3.00	.....	.....	1.02	.....	11.16	10.00	39.95	39.00
	York Chemical Works York, Pa.											
38711	Potato Manure	Woodsboro	1.71	1.00	3.08	3.00	.43	.....	7.70	7.00	40.80	33.50

*Total Phosphoric Acid.

REGISTRATIONS OF FERTILIZERS FOR 1919

(Supplement—From March 12 to August 9. For Key See Page 40)

FIRM AND BRANDS	PER CENT AND SOURCES OF					
	Ammonia (or Nitrogen)		Phosphoric Acid Available		Potash Soluble	
American Agrl. Chem. Co., N. Y.						
Spec. Fish, Bone and Potash Mixture	2	FBt	1	RFB	1	B
A. A. C. Co. (Bowker Fert. Co.)						
Lawn and Garden Dressing	2	TtbA	8	RB	1	MB
A. A. C. Co. (W. S. Farmer & Co.)						
Potash Guano	1	Ttb	8	"	4	"
Armour Fertilizer Works						
Nitrate of Soda	18					
Ground Tankage	9		6.87*			
Ground Tankage	10		6.87*			
4–10–0	4	TADt	10	RT	0	
Corey's H. G. Potato Fert. No. 2	5	FNAT	8	"	5	SN
5–8–3	5	ADTt	8	"	3	SC
7–8–0	7	"	8	"	0	
Dissolved Animal Bone	2		11			
Fish Mixture	2	FAb	10	RFb	0	
Cereal Special No. 3	2	TAN	12	RT	2	M
Cereal Special No. 4	2	"	12	"	0	
Tuscarora's 2–8–3	2	TAt	8	"	3	SNC
Charles E. Baechtel						
Patriot	1	Ct	10	R	0	
Wheat and Grass Producer	1	"	8	"	3	K
Bryant Fertilizer Co.						
Queen Ammoniated Bone	1	TNCA	8	"	1	MB
Special Wheat Mixture	1	"	9	"	2	"
Tomato Superphosphate	2	"	9	"	1	"
Bone Ammoniated	2	"	10	"	0	
Ammoniated Dissolved Bone	3	"	8	"	1	"
Slaughter House Bone	1¼	"	10	"	0	
16% Phosphate			16			
S. C. Dissolved Bone			14			
Formula "E"	2	"	8	"	2	"
Top Dresser	5	"	8	"	0	
Pure Raw Bone	4½		20.60*			
Herbert Bryant's Son						
Standard Fish and Bone	2	F	10	RF	0	
Standard Empress	1¼	T	10	RT	0	
H. G. Acid Phosphate			16			
Central Chemical Co.						
Dissolved Phosphate (Low Grade)			12			
Phoenix (Low Grade)	1½	t	8	"	½	C
Ammoniated Phosphate (Low Grade)	½	"	8	"	0	
Commonwealth			10	"	2	C
Truck Special	3	ANt	10	"	0	
Crown Jewel	1	CAt	9	"	3	N
Grain and Grass Grower	2	"	12	"	2	"
Chesapeake Chemical Co.						
5–7–0 Fertilizer	5	NAT	7	"	0	
Favorite Guano	2	"	10	"	2	kt
1–7–4 Fertilizer	1	"	7	"	4	"
Alkaline 10 and 4			10	"	4	"
Dissolved Phosphate (Low Grade)			12			
Columbia Guano Co.						
Venus Potash Mixture (Low Grade)			8	"	3	N
Prize Crop Potash Mixture			8	"	5	"
Raven Potash Mixture			10	"	3	"
Bully Potash Mixture			10	"	4	"
Royal Potash Mixture			12	"	4	"
Mighty Potash Mixture			12	"	5	"
Grain & Grass Amm'd Phos. (L. Gr.)	1	FT	8	RB	0	
Spec. Wheat Amm'd Phosphate	1	"	12	"	0	
Grain Ammoniated Phosphate	2	ATF	12	"	0	
Extra Dry Guano (Low Grade)	½	FT	8	"	½	"
General Crop Guano	1	"	8	"	4	"
Winter Wheat Guano	1	"	9	"	3	"
Immense Grain Guano	2	AFT	10	"	4	"

FIRM AND BRANDS	PER CENT AND SOURCES OF		
	Ammonia (or Nitrogen)	Phosphoric Acid Available	Potash Soluble
Columbia Guano Co.			
Bountiful Wheat Guano	2 AFT	12 RB	2 N
Half and Half Bone Phosphate	1½	19.00*	0
W. R. Dorsey			
Mixture "D"	2.40 FB	10 RFB	0
Dudley & Carpenter (Swift & Co.)			
Garden City Phosphate	.....	14	.....
Farmers Favorite Fertilizer	2 NADT	9 R	1 NSCK
Reliable Grain Fertilizer	1 "	8 "	1 "
High Grade Acid Phosphate	.....	16	.....
Tobacco Plant Bed Fertilizer	10 "	5 "	1 "
Early Potato Fertilizer	5 "	8 "	1 "
Eastern Guano Co.			
Fish Bone Mixture	1½ FTN	10 "	0
Bone Compound	2 TNAt	10 "	0
Planters' Pride	1 TNt	10 "	0
Crop Grower (Low Grade)	1 "	8 "	0
Dissolved Phosphate	.....	16	.....
Anchor Brand	1 "	8 "	1 N
Potash Special	.....	10 "	2 "
Dissolved Phosphate	.....	14	.....
Valley Queen	1 TCA	9 "	3 N
Farmers Pride	2 "	8 "	2 "
Excelsior	.....	8 "	5 "
Eureka Chemical Co.			
Corn and Potato	1 TB	8 RB	4 M
Grain and Grass	1 "	8 "	1 "
Fish and Potash (Low Grade)	½ TBF	8 "	1 "
Farmers & Planters Co.			
Fish and Potash	3 NFb	9 Rb	3 "
Wheat Guano	1 Fb	10 "	2 "
Griffith & Boyd Co.			
Special Guano	2 NDTAb	8 RT	5 N
Special Formula	2 "	10 "	4 "
Standard Guano	2 "	12 "	2 "
J. George Hart			
Half and Half Bone Mixture	1½ B	12 RB	0
Comet	2 T	10 R	0
Bright Star	1 "	8 "	1 N
S. M. Hess & Bro., Inc.			
Special Wheat Fert. Low Grade)	1 TML	8 RB	2 M
Special Compound (Low Grade)	1 "	8 "	4 "
Emperor Phosphate (Low Grade)	.....	10 R	1 "
Soluble Phosphate and Potash	.....	10 "	2 "
Hubbard Fertilizer Co.			
High Grade Potash Mixture	.....	10 "	4 t
Climax Phosphate	1 T	7 "	4 "
12% Acid Phosphate (Low Grade)	.....	12	.....
Improved Guano	2 TAN	10 "	2 kt
4–8–4 Fertilizer	4 TAN	8 "	4 t
Huston, Darbee & Co.			
Sweet Potato Mixture	3 FA	9 "	3 N
Sweet Potato Mixture	2 FN	9 "	4 "
Tomato Mixture	2 FTN	9 "	0
Grain and Grass (Low Grade)	1 T	9 "	0
Acid Phosphate	.....	14	.....
Koller Fertilizer Co.			
Ammoniated Phosphate	1 TNt	8 "	1 aCt
Potato Grower Phosphate	1 "	7 "	2 "
Two and Ten Phosphate	2 "	10 "	0
High Grade Acid Phosphate	.....	16	.....
Special Potato Phosphate	1 "	7 "	3 aCt
One and Ten Phosphate	1 "	10 "	0
Electric Phosphate (Low Grade)	½ Nt	9 "	½ t
Charles G. Kriel			
Tankage	6½	6½*	.....
Lancaster Chemical Co.			
Grain Special (Low Grade)	½ t	10 R	0
Phosphoric Acid Special	.....	16	.....
Economist (Low Grade)	.....	10 "	.....

FIRM AND BRANDS	PER CENT AND SOURCES OF		
	Ammonia (or Nitrogen)	Phosphoric Acid Available	Potash Soluble
Listers A. C. Works			
Victory Guano	2 ATtb	12 RB	2 MB
King Bee Fertilizer	2 "	10 "	4 "
Martin Fertilizer Co.			
Bull Head Fertilizer	3 NT	8 BR	1 M
Corn and Cereal Special	2 "	8 "	1 "
Sure Grower	1 "	8 "	1 "
Dissolved Organic Compound (L. Gr.)	1¼ "	9 "	½ "
Crop Producer	1¼ "	10 "	0
Pure Raw Bone Meal	4½	21*	.....
Pure Ground Bone	2	22.90*	.....
Dissolved Animal Matter	2 B	12 B	0
Acid Phosphate	.....	14	.....
Ammoniated Phosphate	3 NT	8 BR	0
Ammoniated Phosphate (Low Grade)	2 "	8 "	0
Ammoniated Phosphate (Low Grade)	1 "	8 "	0
Ammoniated Phosphate	2 "	10 "	0
Maryland Guano Co., by Stan. Guano Co.			
No. 1 Fish Guano (Low Grade)	1 FT	7 RB	1 SMc
Ammoniated Guano	1 "	8 "	1 "
Corn and Tomato Grower	2 "	8 "	2 "
Bell Potash Mixture	.....	12 "	3 "
Champion	.....	10 "	2 "
Standard All Crop Guano	2 "	10 "	0
Grain and Grass	1 "	10 "	0
High Grade Acid Phosphate	.....	16	.....
F. Mehring Fertilizer Works, Inc.			
Old Honesty	1 TDNS	11 RT	0
Golden Harvest	1 b	8 RB	1 N
Miller Fertilizer Co.			
Wheat and Grass Grower	2 ANTt	12 "	2 NMm
Grain Grower	2 "	12 "	0
Clermont	1 NAt	10 "	2 "
Alkaline Mixture	0	12 "	2 "
National Plant Food Co.			
Red Snapper Plant Food	5 F	4 F	1¼ T
Oyler & Spangler Fertilizer Works			
Special	2 TCt	11 R	0
Superphosphate (Low Grade)	1 "	9 "	0
16 per cent	.....	16	.....
Pollock Fertilizer Co.			
Potato and Truck Fertilizer	3 TAbL	8 RB	5 B
F. S. Royster Guano Co.			
Madewell Potash Mix. (Low Grade)	.....	8 R	3 N
Bumper Crop Potash Mixture	.....	8 "	5 "
Banner Potash Mixture	.....	10 "	3 "
Superb Potash Mixture	.....	10 "	4 "
Quality Potash Mixture	.....	12 "	4 "
Superior Potash Mixture	.....	12 "	5 "
Grain & Grass Amm'd Phos. (L. Gr.)	1 FT	8 RB	0
Spec. Wheat Amm'd Phosphate	1 "	12 "	0
Alrite Ammoniated Phosphate	2 AFT	12 "	0
Half & Half Wheat Guano (Low Grade)	½ FT	8 "	½ "
General Crop Guano	1 "	8 "	5 "
Seeding Down Special Guano	1 "	9 "	3 "
Sterling Wheat Guano	2 AFT	12 "	2 "
Brilliant Grain Guano	2 "	10 "	4 "
Fifty-Fifty Bone and Phosphate	1½	19.00*	.....
Swift & Co.			
3–10–0	3 NSDT	10 R	0
Clay Soil Special	2 NAT	12 "	0
Bone Meal & Phos. Fert. Mix. No. 2	1½ B	13 RB	0
Raw Bone Meal Fertilizer	4½	23.00*	.....
Special Tobacco Grower	3 NST	8 R	1 NCSa
High Grade Special	3 "	12 "	3 "
Farmers Home	0	10 "	4 kNCS
Champion Wheat and Corn Grower	2 NAT	12 "	2 "
Special H. G. Phos. and Potash	0	12 "	5 "
No. 1 High Grade Grain Grower	2 "	10 "	6 "
No. 2 High Grade Grain Grower	2 "	10 "	4 "
Golden Grain Grower	2 "	8 "	5 NkS
White Potato Fertilizer	4 "	8 "	3 "

FIRM AND BRANDS	PER CENT AND SOURCES OF		
	Ammonia (or Nitrogen)	Phosphoric Acid Available	Potash Soluble
Swift & Co.			
No. 3 Grain Grower	1½ NAT	12 R	1½ NSCk
Wheat Grower	1 "	12 "	2 "
Excelsior	7 "	6 "	5 "
Tennessee Agr'l Chem. Corp.			
Tacco Ground Phosphate	.....	32.00 Inso	.....
Thomas Company			
Corn and Potato	1¼ Tb	10 R	0
Special Mixture (Low Grade)	½ "	8 "	0
Crop Grower	1 "	8 "	1 N
F. W. Tunnell & Co., Inc.			
Fish Manure, 1919	2 TA	10 "	0
J. E. Tygert Co.			
Paramount Pot. & Truck Man., 1918	4 TLMDANb	8 RB	3 M
Welcome Brand Fertilizer	1 TLMb	8 "	2 "
Victor Crop Grower	1 "	8 "	4 "
J. Tyson & Son			
Corn and Potato Fertilizer	1 t	10 R	0
XX Fertilizer	2 TN	9 "	0
Ammoniated Super Phosphate	1 Tt	10 "	0
Half & Half Super Phos. (Low Grade)	1 "	8 "	0
Wm. H. Valliant & Bro.			
King Crop Grower	2 F	8 "	2 a
Acid Phosphate	.....	16	.....
E. S. Valliant & Son			
Grain Grower (Low Grade)	½ bt	10 "	¼ MN
Amm't Potash Mix. (Low Grade)	¼ "	10 "	¼ "
Special Mixture (Low Grade)	¼ "	10 "	0
Oriole (Low Grade)	½ "	10 "	2 "
Ideal	1 "	9 "	2 "
Standard	1 "	9 "	4 "
Big 3	1 "	9 "	3 "
Washington, Alexandria & Cooke Co.			
Potato & Tobacco Man. (Low Grade)	½ At	7 "	2 N
Superphosphate	.....	16	.....
S. L. Webster & Son			
Fish Mixture	2 FT	10 RB	0
Fish and Bone	1½ "	10 "	0
Our Special Make	1 tb	10 "	0
Westminster Fertilizer Co.			
Super A (Low Grade)	1 NA	9 RT	0
Governor	1½ "	11 "	0
Acid Phosphate	.....	16	.....
W. H. Whistler			
Dissolved Bone	2 TDNA	10 RB	0
Fish, Bone and Potash (Low Grade)	½ "	8 "	¼ C

Fertilizer Law of Maryland

(IN EFFECT DECEMBER 1, 1918.)

Section 1. That the term "fertilizer" as used in this Act shall mean any commercial fertilizer, or any article, substance, or mixture sold, offered, or exposed for sale, for manurial purposes in the State of Maryland of which the selling price shall be more than $5.00 per ton of two thousand pounds, but shall not include ground gypsum, lime, ground limestone, ground shells, or dung of domestic animals, in bulk, when sold as such and when not mixed with other fertilizer or fertilizer materials. The term "State Chemist" shall mean the professor in charge of the Chemical Department of the Maryland State College of Agriculture, who shall be ex-officio State Chemist. The term "brand" shall mean the full name, brand and trade-mark under which a fertilizer is sold, together with a statement of the percentage of the valuable ingredients contained in said fertilizer.

Sec. 2. That every manufacturer, jobber, or manipulator of commercial fertilizer, and materials used in the manufacture of the same, who may desire to sell or offer for sale in the State of Maryland such fertilizer or fertilizer materials before offering the same for sale shall file with the Maryland State College of Agriculture upon forms furnished by said College the name of each and every brand of fertilizer which it is desired to sell in the said State by any said manufacturer, jobber, or manipulator, or their agents, together with the name and address of said manufacturer, jobber, or manipulator, and the guaranteed analysis of said fertilizer stating the sources from which the phosphoric acid, nitrogen and potash are derived; and if the said fertilizer is sold under a different name, or names, said fact shall be stated and the different brands which are identical in composition shall be named. The said statements filed with the said College shall be published at least semi-annually together with the analyses made by, or under, the direction of the State Chemist as hereinafter provided.

Sec. 3. That every importer, manufacturer, manipulator, dealer, or agent before selling, offering, or exposing for sale, within the State of Maryland any fertilizer shall pay to the Maryland State College of Agriculture a fee of $10.00 per brand for each brand registered under Section 2 of this Act and on or before December 31st, of each year shall file with the College a statement, made under oath in due form of law, giving the total number of tons of fertilizer sold during that calendar year in the State of Maryland, and shall pay thereon an inspection tax of ten cents per ton; provided, however, goods sold in bulk to manufacturers, manipulators, or mixers for resale, of fertilizers shall not be subject to the said tax of ten cents per ton; provided further that where the tonnage tax paid in any one calendar year is in excess of the brand tax of $10.00 above provided the said brand tax shall be rebated; and provided further that when any manufacturer, dealer or importer has paid the required inspection fees no other person selling the same goods under his name and brand shall be required to pay such fee.

Sec. 4. That every bag, barrel, or package of fertilizer must bear plainly and conspicuously on the outside of same, and every parcel or lot sold in bulk must be accompanied by, a clear and true statement in legible print, and in the order herein stated, the following:

The net weight of the contents of the package or lot in pounds;
Brand name or trade-mark;
Guaranteed analysis in percentage—
Nitrogen (N) in available form or its equivalent in Ammonia (NH^3);
Available Phosphoric Acid (P^2O^5);
Potash (K^2O) soluble in distilled water;
Name and address of manufacturer.

In lieu of the available phosphoric acid above stated, the soluble phosphoric acid, and the reverted phosphoric acid, may be given; also the maximum per cent. of chlorine, and the minimum of insoluble phosphoric acid. There may also be stated on the package the source, or sources, of the several fertilizing constituents. In the case of unacidulated bone, tankage, fish or other animal, or vegetable matter, used as fertilizer, it shall be lawful to guarantee the phosphoric acid as total phosphoric acid, but it shall be unlawful to include the same constituents more than once in the guaranteed analysis of any fertilizer, either in the same form of chemical combination or in a defferent form of chemical combination; provided, however, that in the statement of the guaranteed analysis the minimum percentage only of the several constituents shall be given.

Sec. 5. That it shall be unlawful to sell, offer or expose for sale for fertilizer purposes any raw, or untreated, leather, hair, wool waste, hoof,

horn, peat, cyanogen compounds, muck, tartar pomace, mora meal, or similar materials, either as such or mixed with other fertilizer materials; provided, however, that this section shall not apply to such material as has been treated in a manner to make available the essential fertilizing constituents which it may contain; and provided further that the section shall not apply to the raw materials hereinbefore enumerated which are consigned to, or offered for sale in bulk, to manipulators, or manufacturers of fertilizers.

Sec. 6. That the words "High Grade" shall not appear upon any bag or package of any complete fertilizer containing, according to its guaranteed analysis, less than 1.65% of nitrogen (equivalent to 2% of ammonia), 10% of available phosphoric acid and 2% of potash; that the words "Medium Grade" shall not appear upon any bag or package of any complete fertilizer containing, according to its guaranteed analysis, less than 0.82% of nitrogen (equivalent to 1% of ammonia), 8% of available phosphoric acid and 1% of potash; that the words "High Grade" shall not appear upon any bag or package of acid phosphate with potash containing, according to its guaranteed analysis, less than 13% of available phosphoric acid and 1% of potash; that the words "Medium Grade" shall not appear upon any bag or package of acid phosphate with potash containing, according to its guaranteed analysis, less than 11% of available phosphoric acid and 1% of potash; that the words "High Grade" shall not appear upon any bag or package of plain acid phosphate containing, according to its guaranteed analysis, less than 16% of available phosphoric acid; that the words "Medium Grade" shall not appear upon any bag or package of plain acid phosphate containing, according to its guaranteed analysis, less than 14% of available phosphoric acid; that the words "High Grade" shall not appear upon any bag or package of ammoniated superphosphate containing, according to its guaranteed analysis, less than 10% of available phosphoric acid and 2.47% of nitrogen (equivalent to 3% of ammonia); that the words "Medium Grade" shall not appear upon any bag or package of ammoniated superphosphate containing, according to its guaranteed analysis, less than 10% of availible phosphoric acid and 0.82% of nitrogen (equivalent to 1% of ammonia); that the words "Low Grade" shall be plainly and conspicuously stamped on the outside of every bag, barrel or package of complete fertilizer which contains less than 0.82% of nitrogen (equivalent to 1% of ammonia), 8% of available phosphoric acid and 1% of potash; on the outside of every bag, barrel or package of acid phosphate with potash which contains less than 11% of available phosphoric acid and 1% of potash; on the outside of every bag, barrel or package of ammoniated superphosphate which contains less than 10% of available phosphoric acid and 0.82% of nitrogen (equivalent to 1% of ammonia); and on the outside of every bag, barrel or package of acid phosphate or dissolved rock containing less than 14% of available phosphoric acid.

Sec. 7. That each and every brand of fertilizer, or fertilizer material, filed with the Maryland State College of Agriculture must remain uniform with the guaranteed analysis of said brand, and in no case, even at a subsequent registration, shall the grade be lowered by reducing any, or all, of the several constituents contained therein.

Sec. 8. That it shall be the duty of the Maryland State College of Agriculture to procure for analysis one or more samples, in each year, as far as practicable, of all fertilizers sold, offered for sale, or used in the State of Maryland, and the State Chemist, or any agent or representative, duly authorized by him, or by the Maryland State College of Agriculture, shall have the right to take samples from any lot, or parcel, of fertilizer in the possession, or in the keeping, of any manufacturer, manipulator, dealer, agent, consumer, or transportation company, in said State of Maryland, and it shall be the duty of the Maryland State College of Agriculture to publish at least semi-annually the results of the analysis made by the said College of the samples procured by or sent to it, for such purpose, and when reporting, or publishing the result of any analysis to state the approximate commercial value in dollars and cents of the fertilizer so analyzed per ton of two thousand pounds, such value to be based upon the analysis made at the said College and upon a standard of valuation to be ascertained, fixed and published by said College as above provided after conference with the proper officials of adjacent States.

Sec. 9. Any purchaser of fertilizer, or fertilizers, provided he is not a manufacturer, or manipulator, or agent, of the same, may have taken, in the presence of a disinterested witness a sample, or samples, of said fertilizer and forward the same with all transportation charges prepaid

to the Maryland State College of Agriculture for analysis, provided, said purchaser of fertilizer or fertilizers notify the manufacturer or manipulator of the fertilizer or fertilizers from which said sample or samples are to be taken, or the Agent who sold said goods to said purchaser, by mailing notice in writing at least (6) days in advance of the taking of said sample or samples, said (6) days notice to date from the time of mailing said notice, stating the time and place at which said sample or samples are to be taken, so that the manufacturer or manipulator may have the privilege of having a representative present, or that said Agent may be present, to see that said sample or samples are taken in accordance with the rules and regulations of the Board of Trustees of the Maryland State College of Agriculture; provided, however, that if no representative of the manufacturer or manipulator, or said Agent be present, at the time of said sampling, then two disinterested witnesses, and not one as above provided, must be present that samples so taken shall be from unbroken bags, or packages, which have not been damaged or injured in transit, or by exposure, and which have not been in possession of the owner more than thirty (30) days, provided, further, that said samples be taken from at least 5% of the bags or packages comprising the brand purchased and if there are less than 100 bags, or packages, of the brand so purchased samples shall be taken from not less than 5 bags, or packages, and if there are less than 5 bags or packages samples shall be taken from each. All such samples shall be taken under such additional rules and regulations as may be prescribed by the Maryland State College of Agriculture, provided further, that every sample sent for analysis to the said College shall be fully described on forms to be furnished by said College free of charge, said description giving a full and complete statement of the time and place of sampling, of all marks on the bags or packages thereof, and of all the facts relating to the same, said description and statement shall be signed by the purchaser of the fertilizer, the person drawing the sample and the disinterested witness or witnesses as above provided; and provided, further, that the purchaser, or purchasers, sending such sample, or samples, of fertilizer to said College for analysis shall withhold said descripton or descriptions, of said sample, or samples, until he has received from the said Maryland State College of Agrculture the report of the analysis of said fertilizer. Any person, or persons, receiving an analysis from the said College as required under this Act shall immediately thereafter forward to it the statement required by this Act to be made at the time of taking the sample or samples.

Sec. 10. That it shall be the duty of the Maryland State College of Agriculture to analyze upon request, without cost or charge, all samples of fertilizer sent to said College and taken in the manner prescribed in this Act. The said College, the State Chemist, or his assistants or agents, shall not demand of any purchaser so sending sample, or samples, for analysis any advice, information, or statement, as to any analysis appearing on the original unbroken packages, or bags, from which said sample or samples were taken, or the name or names of any individual, representative, agent, or corporation or firm from which said fertilizer, or fertilizers, were purchased; and it shall be the duty of the said College, through its duly authorized agent, the State Chemist, to at once make a full and complete analysis of the sample, or samples, received in accordance with this provision and within thirty (30) days thereafter return to such person, or persons, from whom the sample, or samples, were received a full and complete analysis of said sample or samples. It shall be unlawful for any individual, representative, or agent, of any corporation or firm, or any corporation or firm itself either directly, or indirectly, to have any communication with the said College, or its chemists, agents or representatives, or the sender of any sample to said College, regarding the analysis of any fertilizer, or fertilizers, sent to the said College by the purchaser or purchasers thereof for analysis until after the report of said analysis. The Maryland State College of Agriculture, the State Chemist, their agents, or representatives, shall not furnish any information, or communicate with any manufacturer of fertilizer, about any such sample submitted for analysis until after a report of the analysis so made shall have been duly furnished to the applicant for such analysis.

Sec. 11. That any purchaser of fertilizer who shall be injured, or defrauded, by the failure of the contents of any bag, barrel, or other package of fertilizer, or any fertilizer in bulk, to conform to the statement of the quantity, quality, marks, labels on or accompanying the same, or filed with the Maryland State College of Agriculture, or who shall purchase fertilizer branded, "pure bone" when the same is adulterated with

oyster shell, or other foreign matter, even if the analysis corresponds to the guaranteed analysis on the package, may recover from the seller, or sellers, thereof in an action of debt an amount equal to the purchase money of said fertilizer and cost of suit, and in case the purchase is made of an agent, or any person, or persons, residing out of the limits of the State of Maryland, or any company, or corporation, whose principal place of business is out of the State of Maryland, the purchaser may at his, or her, option proceed by attachment as now provided for by law in case of non-resident and absconding debtors, against any property, rights or credits, of any person, or persons, company, or corporation, furnishing said fertilizer when such property rights, or credits, can be found within the State of Maryland; provided, the purchaser of any fertilizer shall not be deemed to be defrauded by a shortage in the constituents of said fertilizer when the said shortage does not exceed 5% of the amount guaranteed, but on account of said shortage shall be entitled to recover as liquidated damages the amount of the commercial value of said shortage, provided, however, should said shortage be more than 5% of the commercial value guaranteed that the purchaser shall be entitled to recover as liquidated damages twice the amount of the shortage in commercial value and provided further should a shortage in one or more constituents exceed one-fifth of the guaranteed analysis the purchaser shall be entitled to recover as liquidated damages twice the commercial value of said shortage without any compensation being allowed for any excess in other constituent or constituents except however in no event shall the purchaser be entitled to recover an amount in excess of the purchase price of said fertilizer.

Sec. 12. That the inspection and brand fees provided for in this Act shall be paid to the Maryland State College of Agriculture, and disbursed by it, to cover the cost of the analysis, inspections, sampling, printing, and for the dissemination of information regarding the contents and the analysis of fertilizers subject to this Act, the use and compounding of commercial fertilizers, and the administration and the enforcement of the provisions of this Act.

Sec. 13. That the Board of Trustees of the Maryland State College of Agriculture shall have authority to establish rules and regulations in regard to the inspection, analysis, sale of fertilizer and fertilizer materials, and the publication of all information authorized herein, to the end that the provisions of this Act may be effectively administered and enforced.

Sec. 14. That the brand fee as provided in this Act shall not apply to any fertilizer mixed according to a formula furnished by a consumer; provided, in lieu of the registration, all packages of fertilizers shall be plainly marked, or tagged, on the outside of the package with the words "Mixed to Order", together with a statement thereon of the guaranteed analysis, and in all the other particulars said mixed fertilizer shall conform to the provisions of this Act.

Sec. 15. That every person, firm, corporation, or association, guilty of a violation of any of the provisions contained in Sections No. 2, 4, 5, 6, 7 and 9 of this Act, and every officer, manager, director, or managing agent of any such person, firm, corporation, or association, directly participating in such violation, or consenting thereto, shall be punishable by a fine of $100.00 for the first offense, and, upon a second conviction, shall be punished by a fine of $500.00 or imprisonment for not more than three months, or both, at the discretion of the Court. And it shall be the duty of the State's Attorneys of the several counties of this State to prosecute all violations of any of the provisions contained in said Sections Nos. 2, 4, 5, 6, 7 and 9 brought to their attention, said prosecutions to be in the name of the State of Maryland, and the penalty recovered, when paid, to be turned into the fertilizer fund of the Maryland State College of Agriculture.

Sec. 16. That if any person, firm, or corporation, subject to the provisions of this Act shall fail to file the statement required in Section No. 3 herein regarding the tons of fertilizer sold, and to pay the inspection fee, provided therefor in this Act, within sixty (60) days after the close of the calendar year, the same shall subject said person, firm, or corporation, to a penalty, upon conviction, of One Hundred Dollars, and Two Hundred Dollars for each subsequent week that said inspection fee remains unpaid. Prosecution therefor to be entrusted to the State's Attorneys as in the preceding section provided and brought in the name of the State of Maryland, and the penalty recovered when paid, to be turned into the fertilizer fund of the Maryland State College of Agriculture.

SEC. 17. All Acts, and parts of Acts, inconsistent herewith are hereby repealed, but all fees required to be paid under the provisions of said Article 61 for the calendar year to December 31, 1918, are in no way disturbed.

LOW GRADE FERTILIZERS.

The fact that in most cases low grade fertilizers should be avoided, as being much more expensive in the end than a higher grade, cannot be too strongly insisted upon. It is true that they are cheaper per ton, but the busy farmer does not want to put in his time in handling worthless filler. The cost of mixing, bagging, freight, hauling, etc., is as much for low grade as for high grade.

Fractional guarantees, as "¼% Ammonia," "¼% Potash," etc. Such guarantees are too near nothing to receive serious consideration when buying fertilizer, except to avoid fertilizers with such guarantees. If ammonia and potash are to be used one should not think of less than 1% and, better 2% as a minimum. In mixed fertilizers a minimum of 14% of total plant food (ammonia, available phosphoric acid and potash) is a good rule. It is much better to use straight 16% acid phosphate than a low grade "mixed" fertilizer with the near-zero guarantees.

FERTILIZER REGISTRATION FOR 1919 (Supplement)

From March 12 to August 9

The principal difference between the old Fertilizer Law and the new one that went into effect the present year, is that the fertilizer manufacturers are required to state the materials used in making their fertilizer at the time of registration, and requires this information to be published.

In order to save space it seems desirable to use abbreviations for the various substances used, for example, the letter "B" is used instead of the word "Bone." All of the abbreviations are indicated below.

Nitrogen in fertilizers may be guaranteed as its equivalent in Ammonia, but it is a violation of the Law to use both. The only substances ordinarily used in fertilizers that really contains Nitrogen as Ammonia is Ammonium Sulfate. The other materials contain Nitrogen in some other form, but as it can readily be converted to Ammonia its Ammonia equivalent is generally given. Fourteen pounds of Nitrogen will make or are equivalent to 17 pounds of Ammonia. Thus 0.82 per cent of Nitrogen is the same as 1.00 per cent of Ammonia. There is not a great deal of difference in the cost of Ammonia from the different sources. That from Nitrate of Soda is among the cheapest, and is very soluble in water and liable to make a fertilizer moist, because it attracts moisture. Garbage tankage is the cheapest organic Ammoniate, but is rather insoluble and of slow availability. "Base Goods" is fertilizer made from mixing Raw Rock with low-grade animal matter, such as, hair, feathers, etc., and dissolving the mixture with Sulphuric Acid. In this way matter of little value, as fertilizer, in its natural state, is made readily vailable. Phosphoric Acid, as a rule, comes from Dissolved Phosphate Rock, frequently called "Acid Phosphate." In Mixed Fertilizers containing tankage, fish tankage, and similar materials, a small part of the Phosphoric Acid is furnished from this source.

Potash until recently was furnished almost exclusively from Germany either as Sulphate of Potash, Muriate of Potash, Double Manure Salts or Kainit. These sources have not recently been available and an American Potash industry has sprung up, which is now able to furnish at least one-fourth as much Potash as was used five years ago. Some Potash is also furnished from ashes, and as a by-product from Cement Works and from certain organic substances that are rich in Potash; the principal one being Tobacco Stems. All of the Potash recognized in fertilizer analyses must be soluble in water, and the value of water soluble Potash from the various sources is approximately the same, pound for pound, of actual Potash. Potash insoluble in water, such as we have in certain rocks, especially Felspar, is not counted in the fertilizer analysis, as hot water only is used in extracting Potash in the laboratory.

Note the following:

KEY TO SYMBOLS USED.

AMMONIA (Nitrogen)	PHOSPHORIC ACID AVAILABLE	POTASH SOLUBLE
A—Ammonium Sulfate	A—Animal Matter	a—Ashes
B—Bone	B—Bone	C—Cement by-product
b—Base Goods	b—Base Goods	K—Kainit
C—Cyanamid	F—Fish	M—Muriate
c—Crab Scrap	R—Dissolved Rock	m—Sheep Manure
D—Blood	T—Tankage	N—Nebraska Potash (Sulfate and Carbonate)
F—Fish	*Total Phosphoric Acid in Bone	S—Sulfate
H—Humus or Peat, Treated	**Total Phosphoric Acid in Untreated Rock	T—Tobacco Stems
K—Tobacco Stems		K—Kelp
M—C. S. Meal		t—Trona (California)
m—Sheep Manure		c—Carbonate
N—Nitrate Soda		B—Sugar Beet Res. Char.
T—Animal Tankage		
t—Garbage Tankage		
L—Linseed Meal		

TABLE OF REGISTRATIONS BEGINS ON PAGE 31.

Maryland Fertilizer Tonnage, to the nearest Thousand:

1913	1914	1915	1916	1917	1918
178,000	179,000	170,000	155,000	193,000	175,000